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Radian Corp., Research Triangle Park, NC

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1988 NONMETHANE ORGANIC COMPOUND MONITORING PROGRAM

FINAL REPORT

Volume II:
Urban Air Toxics Monitoring Program

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16. ABSTRACT

From October, 1987 to October, 1988 samples of ambient air were collected at 19 sites in the eastern part of the U.S. Every 12 days, air was integrated over 24-hour periods into passivated stainless steel canisters. Simultaneously, air was drawn through cartridges containing dinitrophenylhydrazine to collect carbonyl compounds. The samples were analyzed at a central laboratory for a total of 37 halogenated and aromatic hydrocarbons, formaldehyde, acetaldehyde, and other oxygenated species. The hydrocarbon species were analyzed by gas chromatography/multiple detectors and gas chromatography/mass spectrometry, while the carbonyl species were analyzed by liquid chromatography. An extensive quality assurance program was carried on to secure high quality data. Complete data for all the hydrocarbon samples are presented in this report.

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SYMBOLS AND ABBREVIATIONS

AC, A.C., or a.c.	area counts, generated from a gas chromatograph
A/D	analog to digital
ADELTA	absolute value of DELTA
ADIF	absolute value of DIF
ADIFF	absolute value of DIFF
AIRS	Aerometric Information Retrieval System
a.m.	ante meridiem
APDIFF	absolute value of PDIFF
APDIF	absolute value of PDIF
Apr	April
ASRL	Atmospheric Sciences Research Laboratory (EPA), now Atmospheric Research and Exposure Assessment Laboratory (AREAL)
ATGA	Atlanta, Georgia
Aug	August
AUTX	Austin, Texas
AZCA	Azusa, California
B1CA	Bakersfield, California (Oildale)
B2CA	Bakersfiled, California (Edison)
B2MA	Boston, Massachusetts (E. Boston)
BHAL	Birmingham, Alabama
Bldg.	building
BMTX	Beaumont, Texas
BNY	New York, New York (Bronx)
BRLA	Baton Rouge, Louisiana
BRVT	Burlington, Vermont
BTX	benzene, toluene, m/p-xylene
C3IL	Chicago, Illinois (Sears Tower)
C4IL	Chicago, Illinois (Carver High School)
C5IL	Chicago, Illinois (Washington High School)
C6IL	Chicago, Illinois (CTA)
C2OH	Cleveland, Ohio (Civic Center)
Cal., or Calib.	calibration
CHNC	Charlotte, North Carolina
CLOH	Cleveland, Ohio (St. Vincent Hospital)
cm	centimeter
D1MI	Detroit, Michigan (WAPCD Laboratory)
D2MI	Detroit, Michigan (WAPCD #4)
DBMI	Dearborn, Michigan
DELTA	Radian NMOC concentration - QAD NMOC concentration, ppmC; Radian NMOC concentration - ASRL concentration, ppmC; or ASRL NMOC concentration - QAD NMOC concentration, ppmC

(Continued)

SYMBOLS AND ABBREVIATIONS (continued)

DIF	(NMOC concentration for the second channel) - (NMOC concentration for the first channel
DIFF	measured NMOC concentration - calculated NMOC concentration ppmC for in-house quality control samples
DLTX	Dallas, Texas
DTMI	Detroit, Michigan
Dup.	duplicate
e	base of natural logarithm, 2.71828...
ECD	electron capture detector
ELTX	El Paso, Texas
EMSL	Environmental Monitoring Systems Laboratory
EPA	United States Environmental Protection Agency
F	Friday
FID	flame ionization detector
FECA	Fremont, California
FWTX	Fort Worth, Texas
GC/ECD	gas chromatography electron capture detection
GC/FID	gas chromatography flame ionization detection
GC/MD	gas chromatography multidetection
GC/MS	gas chromatography mass spectrometry
H	Thursday
H1TX	Houston, Texas
HAIN	Hammond, Indiana
Hg	mercury
HPLC	high performance liquid chromatography
Hr	hour
i.d.	inside diameter
ID	identification
in.	inches
INST.	instrument
JAFL	Jacksonville, Florida
Jul	July
Jun	June
L	liter
L2KY	Louisville, Kentucky
LAMI	Lansing, Michigan
Lpm	liters per minute
m	meter
M	Monday

(continued)

SYMBOLS AND ABBREVIATIONS (continued)

M1NY	New York, New York (Manhattan/P.S. 59)
M1TN	Memphis, Tennessee (Alabama Street)
M2TN	Memphis, Tennessee (Frayser Street)
M2FL	Miami, Florida (U. Miami Campus)
MAX	maximum
mb	megabyte
MDMI	Midland, Michigan
MDL	method detection limit
MID	multiple ion detection
MIFL	Miami, Florida
MIN	minimum
min.	minute
mL	milliliter
mm	millimeter
MNY	New York, New York (Manhattan/Mabel Dean)
MU	mean of ln(NMOC)
N1TN	Nashville, Tennessee (Lentz)
N2TN	Nashville, Tennessee (Trinity Lane)
NBS	National Bureau of Standards
NC	North Carolina
NMOC	Nonmethane organic compound
No.	Number
NOx	oxides of nitrogen
NWNJ	Newark, New Jersey
Oct	October
o.d.	outside diameter
Off.	Office
P1AZ	Phoenix, Arizonia (39th & Earl Streets)
P2AZ	Phoenix, Arizonia (Scottsdale Fire Station)
P2OR	Portland, Oregon
PCDIFF	percent difference = DIFF/calculated NMOC concentration x 100, for in-house QC samples
PDELTA	$\frac{\text{DELTA}}{[(\text{Radian NMOC concentration} + \text{QAD NMOC concentration})/2]} \times 100$; $\frac{\text{DELTA}}{[(\text{Radian NMOC concentration} + \text{ASRL NMOC concentration})/2]} \times 100$; or, $\frac{\text{DELTA}}{[(\text{ASRL NMOC concentration} + \text{QAD NMOC concentration})/2]} \times 100$
PDFID	preconcentration, direct flame ionization detection
PDIF	DIF/([(NMOC concentration, 1st channel) + (NMOC concentration, 2nd channel)]/2) x 100
PHMI	Port Huron, Michigan

(Continued)

SYMBOLS AND ABBREVIATIONS (continued)

PID	photoionization detector
PLNJ	Plainfield, New Jersey
p.m.	post meridiem
ppb	parts per billion
ppbv	parts per billion by volume
ppm	parts per million
ppmC	parts per million by volume as carbon
ppmv	parts per million by volume
PRRI	Providence, Rhode Island
psi	pounds (force) per square inch
psig	pounds (force) per square inch gauge
QA	quality assurance
QAD	Quality Assurance Division (EPA)
QAPP	Quality Assurance Project Plan
QC	quality control
RAO	Radian analysis order: RAO = 1 for the local ambient duplicate sample analyzed first by Radian; RAO = 2 for the local ambient duplicate sample analyzed first by EPA
RT	retention time
RTP	Research Triangle Park
S1CA	Sacramento, California (Meadowview)
S1FL	St. Petersburg, Florida (Azalea Park)
S1MA	Springfield, Massachusetts
S2CA	Sacramento, California (Citrus Heights)
S2FL	St. Petersburg, Florida (East Lake)
S2MA	Springfield, Massachusetts (Hospital)
SAIL	Sauget, Illinois
SAROAD	Storage and Retrieval of Aerometric Data
SATX	San Antonio, Texas
Sep	September
SLMO	St. Louis, Missouri
SOP	standard operating procedure
SOx	oxides of sulfur
SRM	Standard Reference Material
SIGMA	standard deviation of ln(NMOC)
STD. DEV., SD	standard deviation
T	Tuesday
T1FL	Tampa, Florida (EPC)
T2FL	Tampa, Florida (Beach Park)
UATMP	Urban Air Toxics Monitoring Program
ug/m^3	microgram per cubic meter (at 25°C and 1.0 atmosphere)

(Continued)

SYMBOLS AND ABBREVIATIONS (continued)

U.S.	United States
UTM	Universal Transverse Mercator
W	Wednesday
W1NY	New York, New York (World Trade Center, Floor)
WAIL	Waukegan, Illinois
WOMA	Worcester, Massachusetts
°C	degrees Celsius
°F	degrees Fahrenheit
%CV	percent coefficient of variation

11. URBAN AIR TOXICS MONITORING PROGRAM

The Urban Air Toxics Monitoring Program (UATMP) began in October 1987, and ended in October 1988. It was started for the purpose of helping state and local agencies assess the nature and relative magnitude of their air toxics problems. The UATMP consists of three parts: filter samples to be analyzed for certain metals and benzo-a-pyrene, cartridges for collection of carbonyl compounds, and canister samples to be analyzed for 38 gaseous organic compounds. All samples were collected simultaneously, i.e., timers were programmed to start Hi-Vol filters, to start pumps to draw air through the carbonyl cartridges, and to open a valve to start filling the canister -- all beginning at midnight on each scheduled day. Samples were collected every twelfth day for 24-hour periods. All samples were returned to Research Triangle Park (RTP), NC for analysis by appropriate methods. This volume reports the results from analyses of the canister samples. Separate reports will be issued describing the results from analyzing the carbonyl cartridges and the Hi-Vol filters.

From the beginning, the UATMP has been regarded as a screening program. That is, to assess the kinds of metals and organic compounds which may be in urban atmospheres. Because there may be hundreds of these substances in urban environments and because it is not possible to measure all of them in small samples, the UATMP was deliberately structured to confine analysis of the samples to a limited number of metals/substances which were thought to be of special concern to health professionals at the time.

Sampling and analytical methods for ambient organic compounds is a very complex art. Because the concentration of the materials being sought is in the parts-per-billion or sub-parts-per-billion region, these methods are continuously being refined and improved. The best method for either sampling or analysis has yet to be found. The methods used in the UATMP are the best known at this time. The minimum detectable limits for the species of interest are the lowest possible with the methods available. Those who would like to have data at even lower detectable levels than are reported in this volume must wait for future methods.

Nonmethane organic compound (NMOC) and 3-hour air toxics monitoring programs began at four sites in April 1988.[9] From June through September 1988, 41 additional sites collected 3-hour pressurized samples each day, five days a week. Volume I reports on that phase of the program.

Volume II, a companion to Volume I, reports the results of the UATMP which speciated 38 target compounds from 24-hour ambient air samples at 19 urban locations.

Section 11 briefly describes the UATMP and summarizes the data by target compound and by site. Precision, accuracy, and compound identification confirmation results are also summarized. Section 12 gives more detail about the UATMP data by compound and by site. Section 13 discusses sampling equipment and the sample interface system which takes the ambient air sample from the canister, cryogenically preconcentrates the sample, and injects it into the gas chromatograph multidetector (GC/MD) or gas chromatograph/mass spectrometer (GC/MS) analytical system. Section 14 discusses quality assurance and quality control procedures and results--calibration, analytical precision, sampling and analysis precision, accuracy, completeness, compound identification confirmation, compound carryover in canisters and canister pressure, data validation, and data records. Section 15 gives recommendations for the UATMP which have derived from the 1988 program, and Section 16 lists references used in both Volume I and Volume II.

11.1 INTRODUCTION

In the third quarter of 1987, collection of 24-hour ambient air samples began at 19 urban sites in the contiguous United States. Analysis was performed at Radian Corporation's Research Triangle Park laboratory for 38 targeted air toxic organic compounds (see Table 14-4). The UATMP samples were collected on a 12-day schedule beginning the week of September 24, 1987 and continuing through October 6, 1988.[1] Table 11-1 lists the 1988 UATMP sites, along with the Storage and Retrieval of Aerometric Data (SAROAD) and Aerometric Information Retrieval System (AIRS) numbers, and the site codes used throughout this report.

Table 11-2 shows the distribution of valid samples among the UATMP sites, including the number of duplicates, the number of replicates, or repeated

TABLE 11-1. 1988 UATMP SITES

Site Code	City/State	SAROAD No.	AIRS No.
BRVT	Burlington, VT	47-0140-003-A05	50-007-0003
ATGA	Atlanta, GA	11-0020-053-A05	13-121-0053
BHAL	Birmingham, AL	01-1300-003-A05	01-073-1003
L2KY	Louisville, KY	18-2380-020-A05	21-111-1020
JAFL	Jacksonville, FL	10-1960-032-A05	12-031-0032
MIFL	Miami, FL	10-2700-002-A05	12-025-4002
C4IL[a]	Chicago, IL	14-1220-060-A05	17-031-0060
CLOH	Cleveland, OH	36-1300-033-A05	39-035-0033
DTMI	Detroit, MI	23-1180-032-A05	26-163-0032
DBMI	Detroit, MI (Dearborn)	23-1140-002-A05	26-163-0002
SAIL	E. St. Louis, IL (Sauget)	14-6900-010-A05	17-163-1010
HAIN	Hammond, IN	15-1780-008-A05	26-147-0005
PHMI	Port Huron, MI	23-4340-005-A05	26-147-0005
MDMI	Midland, MI	23-3480-005-A05	26-111-0007
LAMI	Lansing, MI	23-2840-013-A05	26-065-0013
DLTX	Dallas, TX	45-1310-069-A05	48-113-0069
H1TX	Houston, TX	45-2560-034-A05	48-201-1034
BRLA	Baton Rouge, LA	19-0280-004-A05	22-033-0004
P2OR	Portland, OR	38-1460-068-A05	41-015-0068

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[a] From October 1987 through April 3, 1988 the site was located at Carver High School and was known as C4IL. From June 25, 1988 through September 18, 1988, the site was located at Washington High School and was known as C5IL. The SAROAD and AIRS Numbers are for C4IL.

TABLE 11-2. 1988 UATMP AMBIENT AIR SAMPLES AND ANALYSES

Site Code	No. of Samples	Duplicate Pairs	GC/MD Analyses Replicate Pairs	GC/MD Analyses Total	GC/MS Analyses
ATGA	31	5	4	40	6
BHAL	31	4	3	38	7
BRLA	30	5	4	39	6
BRVT	31	5	6	42	7
C4IL/C5IL[a]	27	3	4	34	7
CLOH	30	3	6	39	6
DBMI	28	6	4	38	6
DLTX	31	3	3	37	7
DTMI	26	4	5	35	6
H1TX	31	4	4	39	7
HAIN	31	5	4	40	6
JAFL	30	4	3	37	4
L2KY	29	4	4	37	6
LAMI	30	2	5	37	6
MDMI	29	6	4	39	6
MIFL	29	3	4	36	7
P2OR	31	5	3	39	6
PHMI	27	3	4	34	5
SAIL	31	3	5	39	6
Overall	563	77	79	719	118

[a] From October 1987 through April 3, 1988 the site was located at Carver High School and was known as C4IL. From June 25, 1988 through September 18, 1988, the site was located at Washington High School and was known as C5IL.

analyses, and the total number of GC/MD analyses and GC/MS confirmation analyses. A total of 118 analyses, or 20.9% of the total samples, were analyzed by GC/MS for compound identification confirmation.

11.2 DATA SUMMARY

This section summarizes the GC/MD analytical results. Data for each sample are tabulated in Appendix A (see Section 13 for a description of the sample and analysis procedures).

Data are grouped below in two ways, by compound and by site. For each target compound, summary concentrations are given as minima, maxima, and means, collecting the data from all 19 sites. Site-specific data summaries show which target compounds were identified in samples from each site, and give minimum, maximum, and mean concentrations.

11.2.1 Overall Data Summary by Compound

Table 11-3 presents the UATMP target compounds identified for all the sites. The number of cases of identification for each compound above the estimated method detection limit (MDL) is given along with the frequency at which they were identified. The frequency of occurrence is expressed as a percent of the 719 total GC/MD analyses, including replicate and duplicate analyses. Toluene and m/p-xylene were the most frequently identified compounds, while dibromochloromethane was the least, not having been observed in any of the samples analyzed. The concentration range for each compound is given as minimum and maximum, and the average concentration for each compound identified is given as the mean, expressed in ppbv and ug/m^3. In the penultimate column, the mean is also calculated assuming half the MDL for all compounds in which no concentration was measured. In the last column, the mean is calculated assuming the concentration of these undetected compounds is zero.

Ethylbenzene was not a target compound during the first quarter (3rd quarter 1987); therefore, the percent frequency of occurrence was calculated based on the total of GC/MD analyses for the remaining three quarters only. During the second quarter (1st quarter 1988), chloroprene could not be identified due to the inability to obtain a pure chloroprene standard.

TABLE 11-3. UATMP CUMULATIVE COMPOUND IDENTIFICATIONS WITH GC/MD FOR ALL SITES

	Cases[a]							
Compound	No.	% Frequency[b]	Minimum ppbv	Maximum ppbv	Mean[c] ppbv	Mean[c] ug/m^3	Mean[d] ppbv	Mean[e] ppbv
Acetylene	12	6.2	1.69	23.85	12.13	12.91	1.22	0.75
Propylene	32	16.4	1.40	8.12	3.99	6.86	0.70	0.65
1,3-Butadiene	62	31.8	0.05	3.14	0.63	1.39	0.23	0.20
Vinyl chloride	2	1.0	0.45	3.62	2.03	5.20	0.12	0.02
Chloromethane	8	4.1	0.29	22.54	10.99	22.67	0.55	0.45
Chloroethane	26	13.3	0.12	10.34	1.49	3.94	0.24	0.20
Bromomethane	1	0.5	7.14	7.14	7.14	27.71	0.14	0.04
Methylene chloride	34	4.7	0.26	16.14	4.76	16.54	0.28	0.23
trans-1,2-Dichloroethylene	65	9.1	0.09	6.90	1.02	4.04	0.11	0.09
1,1-Dichloroethane	9	1.3	0.03	3.12	0.46	1.86	0.03	0.01
Chloroprene	55	10.2	0.07	8.92	1.03	3.73	0.13	0.10
Bromochloromethane	12	1.7	0.03	0.63	0.18	0.94	0.004	0.003
Chloroform	40	5.6	0.14	38.74	5.81	28.36	0.33	0.32
1,1,1-Trichloroethane	378	52.6	0.01	26.93	1.12	6.13	0.59	0.59
Carbon tetrachloride	12	1.7	0.16	0.59	0.30	1.86	0.01	0.01
1,2-Dichloroethane	314	43.7	0.06	25.72	1.82	7.37	0.81	0.79
Benzene/1,2-dichloroethane	317	44.1	0.29	32.10	3.19	--	1.43	1.41
Benzene	513	71.3	0.05	25.31	1.48	4.71	1.06	1.06
Trichloroethylene	95	13.2	0.07	31.48	1.79	9.61	0.24	0.24
1,2-Dichloropropane	43	6.0	0.03	4.72	1.10	5.06	0.08	0.07
Bromodichloromethane	2	0.3	0.04	0.27	0.16	1.04	0.001	0.0004
trans-1,3-Dichloropropylene	33	4.6	0.04	3.40	0.70	3.16	0.05	0.03
Toluene	675	93.9	0.04	329.30	4.00	15.07	3.76	3.76
n-Octane	113	15.7	0.03	5.09	0.88	4.11	0.15	0.14
n-Octane/trans-1,3-dichloropropylene	33	4.6	0.20	14.74	2.57	--	0.15	0.12
cis-1,3-Dichloropropylene	15	2.1	0.09	4.36	1.01	4.57	0.04	0.02
1,1,2-Trichloroethane	49	6.8	0.06	3.08	0.50	2.74	0.05	0.03
Tetrachloroethylene	114	15.9	0.05	92.73	1.80	12.23	0.31	0.29
Dibromochloromethane	0	0.0	0.00	0.00	0.00	--	0.00	0.00
Chlorobenzene	195	27.1	0.02	4.96	0.60	2.78	0.17	0.16
Ethylbenzene	281	52.0	0.03	161.90	1.44	6.26	0.75	0.75
m/p-Xylene	673	93.6	0.04	67.10	3.96	17.16	3.71	3.71
Styrene/o-xylene	561	78.0	0.03	67.90	1.22	--	0.95	0.95
Bromoform	5	0.7	0.01	1.55	0.42	4.37	0.003	0.003
1,1,2,2-Tetrachloroethane	24	3.3	0.01	2.30	0.53	3.65	0.02	0.02
m-Dichlorobenzene	101	14.0	0.02	3.60	0.44	2.63	0.07	0.06
p-Dichlorobenzene	137	19.1	0.07	309.53	5.66	34.01	1.11	1.08
o-Dichlorobenzene	61	8.5	0.03	4.80	1.18	7.08	0.11	0.10

[a] A total of 719 analyses (including duplicate and replicate) were performed by GC/MD.

[b] The percent of the total analyses in which the compound was identified.

[c] The arithmetic average concentration of all the compound identification cases.

[d] The arithmetic average concentration of all the compound identification cases using half the MDL value for compounds not detected.

[e] The arithmetic average concentration of all the compound identification cases using zero for compounds not detected.

Acetylene, propylene, chloromethane, vinyl chloride, 1,3-butadiene, bromomethane, and chloroethane were identified in the fourth quarter only (3rd quarter 1988) after a modification in the GC/MD analysis conditions. The percent frequency of these seven compounds was calculated using the total GC/MD analyses in the fourth quarter only. m-Xylene and p-xylene coelute on the analytical column used in the GC/MD system, therefore they are reported together as one identification. Styrene and o-xylene also coelute and are reported likewise. In the first three quarters of the UATMP, benzene and 1,2-dichloroethane coeluted on the FID; however, benzene could be quantitated from the PID. 1,2-Dichloroethane was quantitated with low confidence by subtracting the PID response for benzene from the FID response for benzene/1,2-dichloroethane. Benzene and 1,2-dichloroethane were resolved on the FID when the analytical conditions were changed before the fourth quarter. n-Octane and trans-1,3-dichloropropylene coeluted on the FID during the first quarter; therefore, during this time period they were reported together.

Table 11-4 groups the compounds by frequency of occurrence for the UATMP samples. This table is similar to Table 7-3 in Volume I of this report,[9] which groups compounds in the 3-hour ambient air samples in ranges of frequency of occurrence. Frequency of occurrence for some compounds is based on the identifications in samples collected during a period less than one year, as discussed previously in Section 11.2.1. In addition, methylene chloride could not be identified with certainty in several UATMP samples because of the presence of acetonitrile which interfered with the analysis. Nevertheless, many of the compounds in the 24-hour samples fall into the same frequency ranges as the 3-hour air toxics compounds reported in Volume I.[9]

11.2.2 Site-Specific Overall Data Summary

Site-specific compound identifications by GC/MD, by site code, are shown in Tables 11-5 through 11-23. The "cases" column gives the number of analyses in which the compound was identified at a concentration above its estimated MDL at a particular site. Concentration ranges are given in terms of minima and maxima for each compound. The mean, or average, concentrations are reported in the fourth column of each table. Means are also computed assuming information about those samples in which species concentrations were found to

TABLE 11-4. FREQUENCY OF TARGET COMPOUNDS IN 24-HOUR AMBIENT AIR SAMPLES

Range for Frequency of Occurrence	Target Compounds	
100% to 70%	Benzene	Styrene/o-xylene
	m/p-Xylene	
	Toluene	
52% to 31%	Ethylbenzene	1,2-Dichloroethane
	1,1,1-Trichloroethane	1,3-Butadiene
27% to 10%	Tetrachloroethylene	Propylene
	Trichloroethylene	Chlorobenzene
	m-Dichlorobenzene	n-Octane
	Chloroprene	p-Dichlorobenzene
		Chloroethane
9% to <0%[a]	Carbon tetrachloride	
	Acetylene	trans-1,2-Dichloroethylene
	Vinyl chloride	Chloroform
	Chloromethane	1,1,2-Trichloroethane
	Bromomethane	1,2-Dichloropropane
	1,1-Dichloroethane	1,1,2,2-Tetrachloroethane
	Bromochloromethane	Bromodichloromethane
	cis-1,3-Dichloropropylene	trans-1,3-Dichloropropylene
		Bromoform
		Methylene chloride
		o-Dichlorobenzene
Zero[b]	Dibromochloromethane	

[a] The lower limit of this range was the compound estimated method detection limit.

[b] Compound not identified above the detection limit.

TABLE 11-5. 1988 UATMP COMPOUND IDENTIFICATIONS WITH GC/MD FOR ATGA

Compound	Cases[a] ≥ MDL	Concentration, ppbv				
		Minimum	Maximum	Mean[b]	Mean[c]	Mean[d]
Propylene	5	2.55	4.74	3.83	1.63	1.60
1,3-Butadiene	3	0.19	0.34	0.27	0.11	0.07
Methylene chloride	6	0.72	6.32	3.88	0.63	0.58
Chloroprene	6	0.41	1.54	0.71	0.16	0.14
Chloroform	3	0.83	3.40	2.08	0.16	0.16
1,1,1-Trichloroethane	20	0.08	3.24	0.67	0.34	0.34
Carbon tetrachloride	1	0.16	0.16	0.16	0.004	0.004
1,2-Dichloroethane	17	0.27	2.91	1.46	0.63	0.62
Benzene/1,2-dichloroethane	17	0.94	5.00	2.34	1.02	1.00
Benzene	29	0.12	2.50	0.98	0.72	0.71
Trichloroethylene	3	0.29	31.47	14.48	1.09	1.09
1,2-Dichloropropane	4	0.06	1.41	0.64	0.08	0.06
trans-1,3-Dichloropropylene	3	0.20	0.40	0.28	0.04	0.02
Toluene	34	0.37	7.16	2.46	2.10	2.09
n-Octane	5	0.14	0.39	0.21	0.04	0.03
n-Octane/trans-1,3-dichloropropylene	1	0.45	0.45	0.45	0.05	0.01
cis-1,3-dichloropropylene	1	0.55	0.55	0.55	0.03	0.01
1,1,2-Trichloroethane	4	0.17	0.44	0.26	0.04	0.03
Tetrachloroethylene	11	0.08	0.73	0.30	0.11	0.08
Chlorobenzene	10	0.07	0.75	0.36	0.10	0.09
Ethylbenzene	14	0.16	0.82	0.44	0.21	0.21
m/p-Xylene	36	0.14	18.44	3.57	3.22	3.22
Styrene/o-Xylene	29	0.16	2.32	0.86	0.63	0.62
1,1,2,2-Tetrachloroethane	2	1.54	1.55	1.54	0.08	0.08
m-Dichlorobenzene	9	0.05	0.99	0.35	0.09	0.08
p-Dichlorobenzene	7	0.18	6.71	2.08	0.40	0.36
o-Dichlorobenzene	7	0.33	1.61	0.66	0.12	0.12

[a] The number of samples in which the compound was identified. The total number of samples analyzed was 40.

[b] The arithmetic average concentration of all the compound identification cases.

[c] The arithmetic average concentration of all the compound identification cases using half the MDL value for compounds not detected.

[d] The arithmetic average concentration of all the compound identification cases using zero for compounds not detected.

TABLE 11-6. 1988 UATMP COMPOUND IDENTIFICATIONS WITH GC/MD FOR BHAL

Compound	Cases[a] ≥ MDL	Concentration, ppbv				
		Minimum	Maximum	Mean[b]	Mean[c]	Mean[d]
Acetylene	2	1.69	6.00	3.84	1.17	0.77
Propylene	1	2.92	2.92	2.92	0.34	0.29
1,3-Butadiene	2	0.37	0.42	0.40	0.12	0.08
trans-1,2-Dichloroethylene	3	0.32	2.54	1.14	0.11	0.09
1,1-Dichloroethane	2	0.08	0.30	0.19	0.03	0.01
Chloroprene	2	0.23	0.59	0.41	0.06	0.03
1,1,1-Trichloroethane	26	0.04	2.49	0.57	0.39	0.39
1,2-Dichloroethane	21	0.42	25.72	3.36	1.87	1.86
Benzene/1,2-dichloroethane	21	1.07	32.10	5.70	3.17	3.15
Benzene	31	0.11	10.74	1.96	1.61	1.60
Trichloroethylene	1	0.24	0.24	0.24	0.01	0.01
1,2-Dichloropropane	1	1.67	1.67	1.67	0.06	0.04
trans-1,3-Dichloropropylene	3	0.05	0.99	0.45	0.05	0.04
Toluene	36	0.45	8.35	2.79	2.64	2.64
n-Octane	4	0.06	2.43	1.17	0.14	0.12
n-Octane/trans-1,3-dichloropropylene	1	4.20	4.20	4.20	0.14	0.11
cis-1,3-dichloropropylene	1	4.36	4.36	4.36	0.13	0.11
1,1,2-Trichloroethane	1	0.13	0.13	0.13	0.02	0.003
Tetrachloroethylene	5	0.07	0.37	0.20	0.06	0.03
Chlorobenzene	7	0.07	2.01	0.80	0.16	0.15
Ethylbenzene	13	0.15	161.90	12.87	5.77	5.77
m/p-Xylene	37	0.09	23.66	4.29	4.18	4.18
Styrene/o-Xylene	32	0.12	5.62	1.14	0.97	0.96
1,1,2,2-Tetrachloroethane	3	0.08	2.30	0.86	0.07	0.07
m-Dichlorobenzene	3	0.12	1.14	0.54	0.05	0.04
p-Dichlorobenzene	9	0.33	6.26	2.33	0.59	0.55
o-Dichlorobenzene	1	1.84	1.84	1.84	0.06	0.05

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[a] The number of samples in which the compound was identified. The total number of samples analyzed was 38.

[b] The arithmetic average concentration of all the compound identification cases.

[c] The arithmetic average concentration of all the compound identification cases using half the MDL value for compounds not detected.

[d] The arithmetic average concentration of all the compound identification cases using zero for compounds not detected.

TABLE 11-7. 1988 UATMP COMPOUND IDENTIFICATIONS WITH GC/MD FOR BRLA

Compound	Cases[a] ≥ MDL	Concentration, ppbv Minimum	Maximum	Mean[b]	Mean[c]	Mean[d]
Propylene	1	8.12	8.12	8.12	0.86	0.81
1,3-Butadiene	3	0.05	1.17	0.45	0.17	0.13
Chloroethane	2	0.19	0.98	0.59	0.16	0.12
trans-1,2-Dichloroethylene	1	3.28	3.28	3.28	0.10	0.08
Chloroprene	2	0.34	0.58	0.46	0.06	0.03
Chloroform	1	4.81	4.81	4.81	0.13	0.12
1,1,1-Trichloroethane	15	0.13	1.08	0.39	0.15	0.15
1,2-Dichloroethane	23	0.22	5.22	1.56	0.93	0.92
Benzene/1,2-dichloroethane	23	0.75	5.60	2.50	1.49	1.47
Benzene	33	0.08	3.91	1.02	0.87	0.86
Trichloroethylene	3	0.13	1.10	0.74	0.06	0.06
1,2-Dichloropropane	2	0.51	2.36	1.43	0.09	0.07
trans-1,3-Dichloropropylene	3	0.08	0.54	0.38	0.05	0.03
Toluene	37	0.51	9.04	2.16	2.05	2.05
n-Octane	6	0.14	2.22	1.04	0.17	0.16
n-Octane/trans-1,3-dichloropropylene	3	0.31	9.00	5.15	0.43	0.40
1,1,2-Trichloroethane	4	0.06	1.55	0.68	0.09	0.07
Tetrachloroethylene	3	0.11	0.42	0.26	0.05	0.02
Chlorobenzene	7	0.02	1.63	0.52	0.10	0.09
Ethylbenzene	13	0.13	10.88	1.68	0.76	0.75
m/p-Xylene	33	0.14	9.00	2.26	1.92	1.91
Styrene/o-Xylene	30	0.09	5.55	1.10	0.85	0.85
1,1,2,2-Tetrachloroethane	2	0.10	0.13	0.12	0.01	0.01
m-Dichlorobenzene	4	0.10	0.54	0.32	0.04	0.03
p-Dichlorobenzene	8	0.20	14.46	2.42	0.53	0.50
o-Dichlorobenzene	1	1.85	1.85	1.85	0.06	0.05

[a] The number of samples in which the compound was identified. The total number of samples analyzed was 39.

[b] The arithmetic average concentration of all the compound identification cases.

[c] The arithmetic average concentration of all the compound identification cases using half the MDL value for compounds not detected.

[d] The arithmetic average concentration of all the compound identification cases using zero for compounds not detected.

TABLE 11-8. 1988 UATMP COMPOUND IDENTIFICATIONS WITH GC/MD FOR BRVT

		Concentration, ppbv				
Compound	Cases[a] ≥ MDL	Minimum	Maximum	Mean[b]	Mean[c]	Mean[d]
Acetylene	1	15.35	15.35	15.35	1.74	1.28
Propylene	8	2.10	4.30	3.04	2.04	2.03
1,3-Butadiene	8	0.27	0.63	0.46	0.32	0.31
Methylene chloride	1	0.26	0.26	0.26	0.06	0.01
trans-1,2-Dichloroethylene	3	0.39	0.47	0.42	0.05	0.03
Chloroprene	6	0.08	0.53	0.22	0.06	0.04
Chloroform	3	0.18	1.94	0.88	0.07	0.06
1,1,1-Trichloroethane	24	0.04	2.06	0.49	0.28	0.28
Carbon tetrachloride	1	0.18	0.18	0.18	0.005	0.004
1,2-Dichloroethane	16	0.21	2.45	1.00	0.39	0.38
Benzene/1,2-dichloroethane	15	1.13	3.39	2.03	0.75	0.73
Benzene	27	0.14	2.36	1.26	0.82	0.81
1,2-Dichloropropane	1	0.31	0.31	0.31	0.03	0.01
trans-1,3-Dichloropropylene	4	0.10	1.17	0.62	0.08	0.06
Toluene	41	0.56	7.31	2.57	2.51	2.51
n-Octane	11	0.09	1.98	0.72	0.20	0.19
n-Octane/trans-1,3-dichloropropylene	6	0.60	4.68	1.99	0.31	0.28
1,1,2-Trichloroethane	1	3.08	3.08	3.08	0.09	0.07
Tetrachloroethylene	7	0.09	0.86	0.25	0.07	0.04
Chlorobenzene	8	0.07	0.98	0.37	0.08	0.07
Ethylbenzene	16	0.32	3.42	0.79	0.41	0.41
m/p-Xylene	42	0.32	13.40	4.25	4.25	4.25
Styrene/o-Xylene	36	0.15	4.03	1.20	1.03	1.03
1,1,2,2-Tetrachloroethane	1	0.13	0.13	0.13	0.004	0.0032
m-Dichlorobenzene	4	0.67	1.20	0.88	0.09	0.08
p-Dichlorobenzene	12	0.08	1.98	0.73	0.24	0.21
o-Dichlorobenzene	3	0.08	1.97	0.98	0.08	0.07

[a] The number of samples in which the compound was identified. The total number of samples analyzed was 42.

[b] The arithmetic average concentration of all the compound identification cases.

[c] The arithmetic average concentration of all the compound identification cases using half the MDL value for compounds not detected.

[d] The arithmetic average concentration of all the compound identification cases using zero for compounds not detected.

TABLE 11-9. 1988 UATMP COMPOUND IDENTIFICATIONS WITH GC/MD FOR C4IL/C5IL

Compound	Cases[a] ≥ MDL	Concentration, ppbv				
		Minimum	Maximum	Mean[b]	Mean[c]	Mean[d]
1,3-Butadiene	2	0.80	1.14	0.97	0.18	0.14
Chloroethane	4	0.23	2.41	0.84	0.27	0.24
Methylene chloride	3	1.58	5.90	4.39	0.44	0.39
trans-1,2-Dichloroethylene	6	0.29	2.35	1.28	0.24	0.23
Chloroprene	3	0.62	4.87	2.37	0.30	0.27
Bromochloromethane	1	0.17	0.17	0.17	0.01	0.005
1,1,1-Trichloroethane	24	0.09	3.99	1.04	0.73	0.73
Carbon tetrachloride	1	0.17	0.17	0.17	0.01	0.005
1,2-Dichloroethane	13	0.06	2.19	0.75	0.30	0.29
Benzene/1,2-dichloroethane	11	0.71	7.18	1.92	0.65	0.62
Benzene	25	0.13	6.83	1.15	0.85	0.84
Trichloroethylene	5	0.12	0.35	0.26	0.04	0.04
1,2-Dichloropropane	5	0.19	1.93	0.70	0.12	0.10
Bromodichloromethane	1	0.27	0.27	0.27	0.01	0.01
trans-1,3-Dichloropropylene	1	0.25	0.25	0.25	0.03	0.01
Toluene	33	0.31	329.30	16.14	15.66	15.66
n-Octane	4	0.14	0.38	0.22	0.04	0.003
n-Octane/trans-1,3-dichloropropylene	3	3.84	14.74	7.59	0.70	0.67
cis-1,3-dichloropropylene	1	0.44	0.44	0.44	0.03	0.01
1,1,2-Trichloroethane	4	0.09	1.12	0.53	0.08	0.06
Tetrachloroethylene	9	0.16	92.73	15.02	4.00	3.98
Chlorobenzene	12	0.06	3.59	0.46	0.17	0.16
Ethylbenzene	20	0.04	5.74	0.88	0.68	0.67
m/p-Xylene	34	0.39	67.10	4.59	4.59	4.59
Styrene/o-Xylene	28	0.12	12.03	1.06	0.87	0.87
1,1,2,2-Tetrachloroethane	1	0.50	0.50	0.50	0.02	0.01
m-Dichlorobenzene	6	0.02	2.40	0.52	0.10	0.09
p-Dichlorobenzene	1	6.64	6.64	6.64	0.24	0.20
o-Dichlorobenzene	4	0.03	3.74	1.29	0.16	0.15

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[a] The number of samples in which the compound was identified. The total number of samples analyzed was 34.

[b] The arithmetic average concentration of all the compound identification cases.

[c] The arithmetic average concentration of all the compound identification cases using half the MDL value for compounds not detected.

[d] The arithmetic average concentration of all the compound identification cases using zero for compounds not detected.

TABLE 11-10. 1988 UATMP COMPOUND IDENTIFICATIONS WITH GC/MD FOR CLOH

Compound	Cases[a] ≥ MDL	Concentration, ppbv Minimum	Maximum	Mean[b]	Mean[c]	Mean[d]
Acetylene	1	20.73	20.73	20.73	2.34	1.88
1,3-Butadiene	3	0.32	0.75	0.56	0.19	0.15
Chloroethane	1	0.14	0.14	0.14	0.06	0.01
Methylene chloride	5	3.50	6.54	4.86	0.67	0.62
trans-1,2-Dichloroethylene	6	0.10	0.67	0.32	0.07	0.05
Chloroprene	1	0.09	0.09	0.09	0.03	0.003
Bromochloromethane	1	0.14	0.14	0.14	0.005	0.004
Chloroform	1	6.11	6.11	6.11	0.16	0.16
1,1,1-Trichloroethane	31	0.05	6.08	1.37	1.09	1.09
1,2-Dichloroethane	16	0.28	6.02	1.88	0.78	0.77
Benzene/1,2-dichloroethane	16	1.02	9.74	3.52	1.47	1.45
Benzene	27	0.10	6.14	2.50	1.74	1.73
Trichloroethylene	10	0.42	3.53	1.32	0.34	0.34
1,2-Dichloropropane	3	0.93	1.29	1.09	0.10	0.08
trans-1,3-Dichloropropylene	1	0.82	0.82	0.82	0.04	0.02
Toluene	37	0.72	16.32	3.42	3.25	3.24
n-Octane	6	0.14	2.96	1.09	0.18	0.17
1,1,2-Trichloroethane	1	0.09	0.09	0.09	0.02	0.002
Tetrachloroethylene	12	0.11	7.72	1.44	0.47	0.44
Chlorobenzene	8	0.08	1.40	0.42	0.09	0.09
Ethylbenzene	17	0.18	2.15	0.69	0.41	0.40
m/p-Xylene	37	0.18	11.28	3.40	3.22	3.22
Styrene/o-Xylene	35	0.08	67.90	2.68	2.41	2.41
Bromoform	1	0.01	0.01	0.01	0.001	0.0002
1,1,2,2-Tetrachloroethane	4	0.31	0.66	0.47	0.05	0.05
m-Dichlorobenzene	8	0.09	1.15	0.44	0.10	0.09
p-Dichlorobenzene	5	0.26	6.40	3.63	0.50	0.47
o-Dichlorobenzene	5	0.50	1.54	0.79	0.11	0.10

[a] The number of samples in which the compound was identified. The total number of samples analyzed was 39.

[b] The arithmetic average concentration of all the compound identification cases.

[c] The arithmetic average concentration of all the compound identification cases using half the MDL value for compounds not detected.

[d] The arithmetic average concentration of all the compound identification cases using zero for compounds not detected.

TABLE 11-11. 1988 UATMP COMPOUND IDENTIFICATIONS WITH GC/MD FOR DBMI

Compound	Cases[a] ≥ MDL	Concentration, ppbv				
		Minimum	Maximum	Mean[b]	Mean[c]	Mean[d]
Propylene	3	4.38	6.88	5.54	1.70	1.66
1,3-Butadiene	2	0.12	0.15	0.14	0.07	0.03
Vinyl Chloride	1	0.45	0.45	0.45	0.14	0.05
Chloroethane	3	0.34	0.91	0.53	0.20	0.16
Bromomethane	1	7.14	7.14	7.14	0.80	0.71
trans-1,2-Dichloroethylene	3	0.12	0.59	0.34	0.05	0.03
1,1-Dichloroethane	2	0.05	0.09	0.07	0.02	0.004
Chloroprene	2	0.34	0.47	0.40	0.06	0.03
Chloroform	2	1.72	1.86	1.79	0.10	0.09
1,1,1-Trichloroethane	17	0.01	0.88	0.40	0.18	0.18
Carbon tetrachloride	1	0.18	0.18	0.18	0.01	0.005
1,2-Dichloroethane	14	0.22	5.60	1.71	0.64	0.63
Benzene/1,2-dichloroethane	15	0.56	8.21	2.70	1.09	1.07
Benzene	27	0.08	9.17	1.16	0.83	0.82
Trichloroethylene	2	0.48	0.77	0.62	0.03	0.03
1,2-Dichloropropane	2	0.46	0.87	0.67	0.05	0.04
Toluene	37	0.51	5.61	1.64	1.60	1.60
n-Octane	1	0.68	0.68	0.68	0.03	0.02
n-Octane/trans-1,3-dichloropropylene	2	0.76	1.58	1.17	0.09	0.06
1,1,2-Trichloroethane	1	0.22	0.22	0.22	0.03	0.01
Tetrachloroethylene	5	0.07	0.30	0.18	0.05	0.02
Chlorobenzene	4	0.08	2.36	0.79	0.09	0.08
Ethylbenzene	16	0.18	1.42	0.59	0.32	0.32
m/p-Xylene	36	0.10	10.01	2.83	2.68	2.68
Styrene/o-Xylene	25	0.12	4.87	0.70	0.47	0.46
1,1,2,2-Tetrachloroethane	2	0.11	0.32	0.22	0.01	0.01
m-Dichlorobenzene	2	0.16	0.71	0.43	0.03	0.02
p-Dichlorobenzene	5	0.12	2.60	0.85	0.15	0.11
o-Dichlorobenzene	1	0.41	0.41	0.41	0.02	0.01

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[a] The number of samples in which the compound was identified. The total number of samples analyzed was 38.

[b] The arithmetic average concentration of all the compound identification cases.

[c] The arithmetic average concentration of all the compound identification cases using half the MDL value for compounds not detected.

[d] The arithmetic average concentration of all the compound identification cases using zero for compounds not detected.

TABLE 11-12. 1988 UATMP COMPOUND IDENTIFICATIONS WITH GC/MD FOR DLTX

Compound	Cases[a] ≥ MDL	Concentration, ppbv				
		Minimum	Maximum	Mean[b]	Mean[c]	Mean[d]
Propylene	2	3.93	4.37	4.15	0.87	0.83
1,3-Butadiene	1	0.30	0.30	0.30	0.08	0.03
Chloromethane	1	0.29	0.29	0.29	0.12	0.03
Methylene chloride	3	1.51	9.06	6.16	0.55	0.50
trans-1,2-Dichloroethylene	4	0.25	1.90	1.00	0.13	0.11
1,1-Dichloroethane	2	0.03	0.09	0.06	0.02	0.003
Chloroprene	2	0.10	0.45	0.27	0.05	0.02
Bromochloromethane	1	0.14	0.14	0.14	0.01	0.004
1,1,1-Trichloroethane	20	0.03	11.32	0.99	0.53	0.53
Carbon tetrachloride	1	0.23	0.23	0.23	0.01	0.01
1,2-Dichloroethane	17	0.45	1.79	1.07	0.50	0.49
Benzene/1,2-dichloroethane	17	0.50	5.86	1.72	0.81	0.79
Benzene	27	0.05	4.07	0.70	0.51	0.51
Trichloroethylene	4	0.35	1.45	0.66	0.07	0.07
1,2-Dichloropropane	1	0.93	0.93	0.93	0.04	0.03
trans-1,3-Dichloropropylene	3	0.21	1.00	0.50	0.06	0.04
Toluene	33	0.41	92.45	4.39	3.92	3.92
n-Octane	3	0.50	1.97	1.00	0.09	0.08
n-Octane/trans-1,3-dichloropropylene	1	0.44	0.44	0.44	0.05	0.01
cis-1,3-dichloropropylene	2	0.16	1.01	0.58	0.05	0.03
1,1,2-Trichloroethane	1	[illegible]	0.11	0.11	0.02	0.003
Tetrachloroethylene	8	[illegible]	0.81	0.32	0.10	0.07
Chlorobenzene	1	0.61	0.61	0.61	0.03	0.02
Ethylbenzene	10	0.03	1.41	0.31	0.12	0.11
m/p-Xylene	33	0.09	9.37	2.40	2.14	2.14
Styrene/o-Xylene	28	0.05	3.39	0.59	0.45	0.44
1,1,2,2-Tetrachloroethane	2	0.22	0.35	0.28	0.02	0.02
m-Dichlorobenzene	4	0.04	0.30	0.14	0.02	0.01
p-Dichlorobenzene	5	0.30	3.49	1.67	0.26	0.23
o-Dichlorobenzene	3	0.15	0.71	0.37	0.04	0.03

[a] The number of samples in which the compound was identified. The total number of samples analyzed was 37.

[b] The arithmetic average concentration of all the compound identification cases.

[c] The arithmetic average concentration of all the compound identification cases using half the MDL value for compounds not detected.

[d] The arithmetic average concentration of all the compound identification cases using zero for compounds not detected.

TABLE 11-13. 1988 UATMP COMPOUND IDENTIFICATIONS WITH GC/MD FOR DTMI

Compound	Cases[a] ≥ MDL	Concentration, ppbv				
		Minimum	Maximum	Mean[b]	Mean[c]	Mean[d]
Propylene	6	3.60	7.42	4.82	3.23	3.21
1,3-Butadiene	4	0.27	0.43	0.36	0.19	0.16
Chloroethane	2	1.90	10.34	6.12	1.40	1.36
Methylene chloride	1	15.96	15.96	15.96	0.51	0.46
trans-1,2-Dichloroethylene	3	0.17	3.59	1.46	0.14	0.13
Chloroprene	2	0.39	0.77	0.58	0.07	0.04
1,1,1-Trichloroethane	16	0.04	2.01	0.58	0.26	0.26
1,2-Dichloroethane	10	0.42	3.93	2.09	0.61	0.60
Benzene/1,2-dichloroethane	10	0.92	6.91	3.58	1.05	1.02
Benzene	19	0.10	3.02	1.81	0.99	0.98
Trichloroethylene	2	0.24	0.70	0.47	0.03	0.03
1,2-Dichloropropane	1	0.97	0.97	0.97	0.05	0.03
trans-1,3-Dichloropropylene	1	0.59	0.59	0.59	0.04	0.02
Toluene	32	0.55	21.10	3.45	3.16	3.16
n-Octane	10	0.14	1.01	0.46	0.14	0.13
n-Octane/trans-1,3-dichloropropylene	3	1.44	4.56	2.56	0.25	0.22
1,1,2-Trichloroethane	2	0.13	1.64	0.88	0.07	0.05
Tetrachloroethylene	8	0.07	12.76	2.05	0.50	0.47
Chlorobenzene	12	0.06	1.81	0.43	0.16	0.15
Ethylbenzene	14	0.19	1.93	0.70	0.35	0.35
m/p-Xylene	35	0.26	13.57	4.25	4.25	4.25
Styrene/o-Xylene	27	0.12	3.65	0.89	0.69	0.69
m-Dichlorobenzene	7	0.03	1.01	0.39	0.09	0.08
p-Dichlorobenzene	6	0.61	9.68	3.85	0.70	0.66
o-Dichlorobenzene	2	0.08	1.62	0.85	0.06	0.05

[a] The number of samples in which the compound was identified. The total number of samples analyzed was 35.

[b] The arithmetic average concentration of all the compound identification cases.

[c] The arithmetic average concentration of all the compound identification cases using half the MDL value for compounds not detected.

[d] The arithmetic average concentration of all the compound identification cases using zero for compounds not detected.

TABLE 11-14. 1988 UATMP COMPOUND IDENTIFICATIONS WITH GC/MD FOR H1TX

Compound	Cases[a] ≥ MDL	Concentration, ppbv				
		Minimum	Maximum	Mean[b]	Mean[c]	Mean[d]
1,3-Butadiene	6	0.48	1.76	1.11	0.63	0.60
Vinyl Chloride	1	3.62	3.62	3.62	0.42	0.33
trans-1,2-Dichloroethylene	1	0.20	0.20	0.20	0.02	0.01
1,1-Dichloroethane	1	3.12	3.12	3.12	0.10	0.08
Chloroprene	5	0.24	8.92	3.87	0.69	0.67
Bromochloromethane	1	0.10	0.10	0.10	0.004	0.003
Chloroform	1	0.55	0.55	0.55	0.02	0.01
1,1,1-Trichloroethane	14	0.17	26.93	2.69	0.97	0.97
1,2-Dichloroethane	25	0.40	3.94	1.78	1.15	1.14
Benzene/1,2-dichloroethane	25	1.21	6.44	2.91	1.88	1.87
Benzene	36	0.09	5.29	1.49	1.38	1.38
Trichloroethylene	1	1.45	1.45	1.45	0.04	0.04
1,2-Dichloropropane	4	1.02	2.47	1.50	0.17	0.15
trans-1,3-Dichloropropylene	1	0.22	0.22	0.22	0.03	0.01
Toluene	39	0.46	112.53	5.80	5.80	5.80
n-Octane	8	0.15	2.10	1.04	0.23	0.21
n-Octane/trans-1,3-dichloropropylene	1	0.46	0.46	0.46	0.05	0.01
1,1,2-Trichloroethane	6	0.12	1.12	0.49	0.09	0.08
Tetrachloroethylene	3	0.11	0.84	0.46	0.07	0.04
Chlorobenzene	15	0.05	1.64	0.47	0.19	0.18
Ethylbenzene	19	0.20	3.15	0.87	0.54	0.54
m/p-Xylene	39	0.20	43.94	4.19	4.19	4.19
Styrene/o-Xylene	35	0.12	17.80	1.43	1.28	1.28
m-Dichlorobenzene	10	0.02	1.48	0.30	0.08	0.08
p-Dichlorobenzene	8	0.26	4.42	2.21	0.49	0.45
o-Dichlorobenzene	3	0.09	2.00	0.79	0.07	0.06

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[a] The number of samples in which the compound was identified. The total number of samples analyzed was 39.

[b] The arithmetic average concentration of all the compound identification cases.

[c] The arithmetic average concentration of all the compound identification cases using half the MDL value for compounds not detected.

[d] The arithmetic average concentration of all the compound identification cases using zero for compounds not detected.

TABLE 11-15. 1988 UATMP COMPOUND IDENTIFICATIONS WITH GC/MD FOR HAIN

Compound	Cases[a] ≥ MDL	Concentration, ppbv				
		Minimum	Maximum	Mean[b]	Mean[c]	Mean[d]
1,3-Butadiene	2	1.11	1.53	1.32	0.33	0.29
Methylene chloride	1	3.94	3.94	3.94	0.15	0.10
trans-1,2-Dichloroethylene	4	0.16	1.98	0.78	0.10	0.08
Chloroprene	4	0.40	5.06	2.26	0.33	0.30
Chloroform	6	0.98	4.58	2.11	0.32	0.32
1,1,1-Trichloroethane	15	0.04	1.63	0.44	0.16	0.16
1,2-Dichloroethane	11	0.50	8.54	3.03	0.85	0.83
Benzene/1,2-dichloroethane	11	1.04	16.95	4.87	1.37	1.34
Benzene	20	0.08	8.41	1.70	0.86	0.85
Trichloroethylene	2	0.17	1.81	0.99	0.05	0.05
1,2-Dichloropropane	2	0.26	1.21	0.74	0.06	0.04
trans-1,3-Dichloropropylene	2	3.10	3.40	3.25	0.18	0.16
Toluene	39	0.36	17.10	2.50	2.44	2.44
n-Octane	9	0.38	4.13	1.14	0.27	0.26
n-Octane/trans-1,3-dichloropropylene	1	4.40	4.40	4.40	0.14	0.11
cis-1,3-dichloropropylene	2	1.20	1.50	1.35	0.09	0.07
1,1,2-Trichloroethane	2	0.14	1.71	0.92	0.07	0.05
Tetrachloroethylene	1	0.68	0.68	0.68	0.05	0.02
Chlorobenzene	10	0.05	1.34	0.49	0.13	0.12
Ethylbenzene	11	0.11	1.63	0.40	0.16	0.15
m/p-Xylene	35	0.09	12.24	2.60	2.28	2.28
Styrene/o-Xylene	28	0.08	3.25	0.66	0.47	0.46
1,1,2,2-Tetrachloroethane	2	0.36	0.68	0.52	0.03	0.03
m-Dichlorobenzene	3	0.32	0.81	0.63	0.06	0.05
p-Dichlorobenzene	6	0.39	9.72	2.83	0.46	0.43
o-Dichlorobenzene	1	0.07	0.07	0.07	0.01	0.002

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[a] The number of samples in which the compound was identified. The total number of samples analyzed was 40.

[b] The arithmetic average concentration of all the compound identification cases.

[c] The arithmetic average concentration of all the compound identification cases using half the MDL value for compounds not detected.

[d] The arithmetic average concentration of all the compound identification cases using zero for compounds not detected.

TABLE 11-16. 1988 UATMP COMPOUND IDENTIFICATIONS WITH GC/MD FOR JAFL

Compound	Cases[a] ≥ MDL	Concentration, ppbv				
		Minimum	Maximum	Mean[b]	Mean[c]	Mean[d]
1,3-Butadiene	1	0.71	0.71	0.71	0.11	0.06
Chloromethane	1	13.26	13.26	13.26	1.30	1.21
Chloroethane	2	0.12	0.22	0.17	0.07	0.03
trans-1,2-Dichloroethylene	3	0.28	1.04	0.61	0.07	0.05
Bromochloromethane	2	0.03	0.05	0.04	0.004	0.002
Chloroform	1	1.32	1.32	1.32	0.04	0.04
1,1,1-Trichloroethane	11	0.07	6.46	1.75	0.52	0.52
1,2-Dichloroethane	18	0.48	4.83	1.88	0.93	0.92
Benzene/1,2-dichloroethane	18	0.98	5.72	2.59	1.28	1.26
Benzene	29	0.09	2.62	0.77	0.61	0.60
Trichloroethylene	4	0.12	2.29	0.96	0.11	0.10
1,2-Dichloropropane	1	0.46	0.46	0.46	0.03	0.01
trans-1,3-Dichloropropylene	1	0.61	0.61	0.61	0.04	0.02
Toluene	29	0.46	9.06	2.87	2.25	2.25
n-Octane	3	0.53	3.53	1.64	0.15	0.13
1,1,2-Trichloroethane	4	0.09	2.30	0.84	0.11	0.09
Tetrachloroethylene	2	0.12	0.16	0.14	0.04	0.01
Chlorobenzene	9	0.07	1.09	0.43	0.11	0.10
Ethylbenzene	14	0.13	8.06	1.21	0.63	0.63
m/p-Xylene	32	0.14	22.52	3.79	3.28	3.28
Styrene/o-Xylene	28	0.06	6.28	1.50	1.14	1.13
Bromoform	1	1.55	1.55	1.55	0.04	0.04
m-Dichlorobenzene	5	0.11	3.60	1.12	0.16	0.15
p-Dichlorobenzene	4	1.52	16.76	6.17	0.71	0.67
o-Dichlorobenzene	5	0.55	4.80	2.39	0.33	0.32

[a] The number of samples in which the compound was identified. The total number of samples analyzed was 37.

[b] The arithmetic average concentration of all the compound identification cases.

[c] The arithmetic average concentration of all the compound identification cases using half the MDL value for compounds not detected.

[d] The arithmetic average concentration of all the compound identification cases using zero for compounds not detected.

TABLE 11-17. 1988 UATMP COMPOUND IDENTIFICATIONS WITH GC/MD FOR L2KY

Compound	Cases[a] $\geq$ MDL	Concentration, ppbv Minimum	Maximum	Mean[b]	Mean[c]	Mean[d]
Acetylene	1	14.64	14.64	14.64	1.91	1.46
Propylene	2	4.59	6.67	5.63	1.17	1.13
1,3-Butadiene	7	0.16	0.89	0.40	0.29	0.28
Chloromethane	2	3.77	4.09	3.93	0.87	0.79
trans-1,2-Dichloroethylene	3	0.09	0.82	0.40	0.05	0.03
1,1-Dichloroethane	2	0.12	0.26	0.19	0.03	0.01
Chloroprene	6	0.07	0.74	0.34	0.10	0.07
Chloroform	1	3.12	3.12	3.12	0.09	0.08
1,1,1-Trichloroethane	22	0.03	3.26	0.76	0.45	0.45
1,2-Dichloroethane	17	0.52	5.11	1.93	0.90	0.88
Benzene/1,2-dichloroethane	17	0.97	8.20	3.30	1.54	1.52
Benzene	25	0.14	3.09	1.57	1.07	1.06
Trichloroethylene	5	0.08	0.69	0.37	0.05	0.05
1,2-Dichloropropane	4	0.26	1.39	0.89	0.11	0.10
Bromodichloromethane	1	0.04	0.04	0.04	0.002	0.001
Toluene	37	0.26	31.35	7.03	7.03	7.03
n-Octane	7	0.33	5.09	1.79	0.35	0.34
1,1,2-Trichloroethane	1	0.36	0.36	0.36	0.03	0.01
Tetrachloroethylene	3	0.19	0.69	0.45	0.07	0.04
Chlorobenzene	14	0.10	1.91	0.41	0.16	0.15
Ethylbenzene	17	0.34	2.37	1.33	0.81	0.81
m/p-Xylene	37	0.42	18.88	6.09	6.09	6.09
Styrene/o-Xylene	32	0.09	4.86	1.68	1.45	1.45
1,1,2,2-Tetrachloroethane	1	0.42	0.42	0.42	0.01	0.01
m-Dichlorobenzene	4	0.05	0.34	0.16	0.03	0.02
p-Dichlorobenzene	10	0.26	4.33	1.44	0.42	0.39
o-Dichlorobenzene	4	0.21	0.39	0.27	0.04	0.03

[a] The number of samples in which the compound was identified. The total number of samples analyzed was 37.

[b] The arithmetic average concentration of all the compound identification cases.

[c] The arithmetic average concentration of all the compound identification cases using half the MDL value for compounds not detected.

[d] The arithmetic average concentration of all the compound identification cases using zero for compounds not detected.

TABLE 11-18. 1988 UATMP COMPOUND IDENTIFICATIONS WITH GC/MD FOR LAMI

Compound	Cases[a] ≥ MDL	Concentration, ppbv				
		Minimum	Maximum	Mean[b]	Mean[c]	Mean[d]
Propylene	2	1.75	1.84	1.80	0.44	0.40
Methylene chloride	1	16.14	16.14	16.14	0.49	0.44
Bromochloromethane	1	0.63	0.63	0.63	0.02	0.02
Chloroform	1	0.26	0.26	0.26	0.01	0.01
1,1,1-Trichloroethane	13	0.01	0.99	0.35	0.12	0.12
1,2-Dichloroethane	12	0.18	2.65	1.05	0.35	0.34
Benzene/1,2-dichloroethane	12	0.29	3.72	1.47	0.50	0.48
Benzene	21	0.05	2.35	0.55	0.32	0.31
Trichloroethylene	2	0.70	1.03	0.87	0.05	0.05
1,2-Dichloropropane	1	0.97	0.97	0.97	0.05	0.03
trans-1,3-Dichloropropylene	1	0.46	0.46	0.46	0.03	0.01
Toluene	33	0.20	17.52	3.13	2.79	2.79
n-Octane	7	0.18	2.59	0.96	0.19	0.18
n-Octane/trans-1,3-dichloropropylene	1	0.20	0.20	0.20	0.04	0.01
cis-1,3-dichloropropylene	2	0.53	0.60	0.57	0.05	0.03
1,1,2-Trichloroethane	6	0.18	0.52	0.32	0.07	0.05
Tetrachloroethylene	10	0.07	0.77	0.27	0.10	0.07
Chlorobenzene	4	0.13	0.32	0.23	0.03	0.03
Ethylbenzene	14	0.12	3.35	0.72	0.39	0.39
m/p-Xylene	35	0.05	21.89	3.73	3.53	3.53
Styrene/o-Xylene	26	0.04	5.89	0.91	0.64	0.64
Bromoform	1	0.49	0.49	0.49	0.01	0.01
1,1,2,2-Tetrachloroethane	1	1.60	1.60	1.60	0.04	0.04
m-Dichlorobenzene	9	0.02	1.66	0.36	0.10	0.09
p-Dichlorobenzene	3	2.01	9.23	5.29	0.47	0.43
o-Dichlorobenzene	4	0.27	1.35	0.81	0.10	0.09

[a] The number of samples in which the compound was identified. The total number of samples analyzed was 37.

[b] The arithmetic average concentration of all the compound identification cases.

[c] The arithmetic average concentration of all the compound identification cases using half the MDL value for compounds not detected.

[d] The arithmetic average concentration of all the compound identification cases using zero for compounds not detected.

TABLE 11-19. 1988 UATMP COMPOUND IDENTIFICATIONS WITH GC/MD FOR MDMI

Compound	Cases[a] ≥ MDL	Concentration, ppbv				
		Minimum	Maximum	Mean[b]	Mean[c]	Mean[d]
Acetylene	1	15.60	15.60	15.60	2.01	1.56
1,3-Butadiene	3	0.30	1.85	0.94	0.32	0.28
Chloromethane	4	11.16	22.54	16.62	6.71	6.65
Chloroethane	3	1.38	9.62	4.20	1.30	1.26
Methylene chloride	7	1.32	8.28	3.81	0.73	0.68
trans-1,2-Dichloroethylene	3	0.22	0.95	0.51	0.06	0.04
Bromochloromethane	2	0.11	0.33	0.22	0.01	0.01
Chloroform	3	0.37	2.77	1.19	0.09	0.09
1,1,1-Trichloroethane	20	0.06	11.48	1.19	0.61	0.61
Carbon tetrachloride	4	0.37	0.59	0.45	0.05	0.05
1,2-Dichloroethane	13	0.16	4.75	1.46	0.50	0.49
Benzene/1,2-dichloroethane	16	0.47	8.94	2.61	1.10	1.07
Benzene	25	0.07	6.75	1.43	0.93	0.92
Trichloroethylene	4	0.07	3.62	1.03	0.11	0.11
1,2-Dichloropropane	2	0.25	0.37	0.31	0.03	0.02
trans-1,3-Dichloropropylene	1	1.11	1.11	1.11	0.05	0.03
Toluene	39	0.27	12.29	2.03	2.03	2.03
n-Octane	4	0.23	1.56	1.11	0.13	0.11
1,1,2-Trichloroethane	3	0.11	0.22	0.15	0.03	0.01
Tetrachloroethylene	11	0.09	3.14	1.07	0.33	0.30
Chlorobenzene	16	0.04	1.30	0.55	0.23	0.23
Ethylbenzene	14	0.09	0.72	0.33	0.16	0.16
m/p-Xylene	35	0.08	8.51	1.59	1.43	1.43
Styrene/o-Xylene	29	0.04	3.67	0.64	0.48	0.48
1,1,2,2-Tetrachloroethane	2	0.03	0.25	0.14	0.01	0.01
m-Dichlorobenzene	6	0.03	0.82	0.23	0.04	0.03
p-Dichlorobenzene	4	0.27	2.09	1.22	0.17	0.13
o-Dichlorobenzene	4	0.04	0.41	0.19	0.03	0.02

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[a] The number of samples in which the compound was identified. The total number of samples analyzed was 39.

[b] The arithmetic average concentration of all the compound identification cases.

[c] The arithmetic average concentration of all the compound identification cases using half the MDL value for compounds not detected.

[d] The arithmetic average concentration of all the compound identification cases using zero for compounds not detected.

TABLE 11-20. 1988 UATMP COMPOUND IDENTIFICATIONS WITH GC/MD FOR MIFL

Compound	Cases[a] ≥ MDL	Concentration, ppbv				
		Minimum	Maximum	Mean[b]	Mean[c]	Mean[d]
Acetylene	1	10.16	10.16	10.16	1.47	1.02
Propylene	2	1.40	3.11	2.26	0.49	0.45
1,3-Butadiene	1	0.20	0.20	0.20	0.07	0.02
Chloroethane	2	0.37	0.52	0.44	0.13	0.09
Methylene chloride	2	4.32	4.59	4.46	0.30	0.25
trans-1,2-Dichloroethylene	5	0.28	6.90	1.87	0.28	0.26
Chloroprene	2	0.10	1.00	0.55	0.07	0.04
Chloroform	5	0.71	38.35	23.39	3.25	3.25
1,1,1-Trichloroethane	25	0.16	23.69	2.42	1.68	1.68
Carbon tetrachloride	1	0.16	0.16	0.16	0.01	0.005
1,2-Dichloroethane	23	0.25	3.18	1.48	0.95	0.95
Benzene/1,2-dichloroethane	23	1.03	4.65	2.23	1.44	1.43
Benzene	33	0.06	2.12	0.91	0.83	0.83
Trichloroethylene	22	0.08	7.64	2.58	1.57	1.57
1,2-Dichloropropane	2	4.41	4.72	4.56	0.27	0.25
trans-1,3-Dichloropropylene	4	0.04	1.40	0.54	0.08	0.06
Toluene	35	1.44	11.18	4.76	4.63	4.63
n-Octane	6	0.44	1.34	0.79	0.14	0.13
n-Octane/trans-1,3-dichloropropylene	3	1.41	2.28	1.80	0.18	0.15
1,1,2-Trichloroethane	2	0.19	0.26	0.22	0.03	0.01
Tetrachloroethylene	7	0.11	3.29	0.84	0.19	0.16
Chlorobenzene	18	0.14	1.33	0.56	0.29	0.28
Ethylbenzene	17	0.36	2.30	0.87	0.55	0.54
m/p-Xylene	32	0.31	18.14	5.21	4.63	4.63
Styrene/o-Xylene	34	0.12	6.52	1.72	1.62	1.62
Bromoform	1	0.05	0.05	0.05	0.002	0.001
m-Dichlorobenzene	7	0.08	0.98	0.47	0.10	0.09
p-Dichlorobenzene	17	0.46	24.56	3.39	1.63	1.60
o-Dichlorobenzene	6	1.17	3.89	2.27	0.39	0.38

[a] The number of samples in which the compound was identified. The total number of samples analyzed was 36.

[b] The arithmetic average concentration of all the compound identification cases.

[c] The arithmetic average concentration of all the compound identification cases using half the MDL value for compounds not detected.

[d] The arithmetic average concentration of all the compound identification cases using zero for compounds not detected.

TABLE 11-21. 1988 UATMP COMPOUND IDENTIFICATIONS WITH GC/MD FOR P2OR

Compound	Cases[a] ≥ MDL	Concentration, ppbv				
		Minimum	Maximum	Mean[b]	Mean[c]	Mean[d]
1,3-Butadiene	6	0.46	3.14	1.44	0.98	0.96
Chloroethane	2	0.13	0.14	0.13	0.07	0.03
Methylene chloride	1	4.56	4.56	4.56	0.17	0.12
trans-1,2-Dichloroethylene	9	0.14	5.09	2.26	0.54	0.52
Chloroprene	5	0.19	1.07	0.47	0.11	0.09
Bromochloromethane	1	0.09	0.09	0.09	0.002	0.002
Chloroform	3	0.14	0.54	0.33	0.03	0.03
1,1,1-Trichloroethane	16	0.09	1.78	0.55	0.23	0.23
1,2-Dichloroethane	24	0.45	4.88	1.85	1.15	1.15
Benzene/1,2-dichloroethane	25	0.98	5.44	2.74	1.77	1.76
Benzene	34	0.06	2.95	1.07	0.93	0.93
Trichloroethylene	2	0.31	0.40	0.36	0.02	0.02
1,2-Dichloropropane	3	1.43	1.80	1.66	0.15	0.13
trans-1,3-Dichloropropylene	2	0.08	2.29	1.18	0.08	0.06
Toluene	38	0.72	6.74	2.47	2.41	2.41
n-Octane	3	0.20	2.71	1.12	0.10	0.09
n-Octane/trans-1,3-dichloropropylene	2	0.97	1.52	1.24	0.10	0.06
cis-1,3-dichloropropylene	1	2.29	2.29	2.29	0.08	0.06
1,1,2-Trichloroethane	1	0.18	0.18	0.18	0.02	0.005
Tetrachloroethylene	2	0.14	1.07	0.60	0.06	0.03
Chlorobenzene	13	0.03	1.39	0.55	0.19	0.18
Ethylbenzene	13	0.15	1.85	0.69	0.31	0.30
m/p-Xylene	36	0.15	17.22	4.53	4.18	4.18
Styrene/o-Xylene	29	0.04	3.72	0.99	0.74	0.74
m-Dichlorobenzene	3	0.05	1.41	0.62	0.06	0.05
p-Dichlorobenzene	8	0.33	309.53	40.25	8.29	8.26
o-Dichlorobenzene	3	0.10	2.17	0.82	0.07	0.06

[a] The number of samples in which the compound was identified. The total number of samples analyzed was 39.

[b] The arithmetic average concentration of all the compound identification cases.

[c] The arithmetic average concentration of all the compound identification cases using half the MDL value for compounds not detected.

[d] The arithmetic average concentration of all the compound identification cases using zero for compounds not detected.

TABLE 11-22. 1988 UATMP COMPOUND IDENTIFICATIONS WITH GC/MD FOR PHMI

Compound	Cases[a] ≥ MDL	Concentration, ppbv				
		Minimum	Maximum	Mean[b]	Mean[c]	Mean[d]
Acetylene	3	8.96	23.85	17.41	5.57	5.22
1,3-Butadiene	3	0.20	0.30	0.26	0.11	0.08
Chloroethane	2	0.42	3.30	1.86	0.41	0.37
Methylene chloride	1	2.22	2.22	2.22	0.12	0.07
trans-1,2-Dichloroethylene	5	0.10	0.28	0.19	0.05	0.03
Chloroprene	2	0.53	0.66	0.60	0.07	0.04
Chloroform	7	0.47	12.98	3.70	0.70	0.70
1,1,1-Trichloroethane	24	0.14	6.63	2.08	1.35	1.35
Carbon tetrachloride	2	0.35	0.35	0.35	0.02	0.02
1,2-Dichloroethane	9	0.49	6.09	1.84	0.46	0.45
Benzene/1,2-dichloroethane	10	1.16	6.17	2.51	0.71	0.68
Benzene	20	0.05	5.46	1.19	0.65	0.64
Trichloroethylene	12	0.31	3.01	1.08	0.35	0.35
1,2-Dichloropropane	1	0.55	0.55	0.55	0.03	0.01
trans-1,3-Dichloropropylene	1	0.23	0.23	0.23	0.03	0.01
Toluene	28	0.04	13.33	2.85	2.16	2.16
n-Octane	4	0.08	1.24	0.65	0.08	0.07
n-Octane/trans-1,3-dichloropropylene	3	1.27	1.48	1.40	0.15	0.11
Tetrachloroethylene	3	0.12	0.22	0.17	0.05	0.01
Chlorobenzene	4	0.18	0.64	0.31	0.04	0.03
Ethylbenzene	13	0.07	1.06	0.46	0.23	0.23
m/p-Xylene	30	0.04	8.34	2.09	1.70	1.69
Styrene/o-Xylene	21	0.03	2.13	0.48	0.28	0.27
m-Dichlorobenzene	1	0.12	0.12	0.12	0.01	0.003
p-Dichlorobenzene	2	0.10	1.32	0.71	0.08	0.04

[a] The number of samples in which the compound was identified. The total number of samples analyzed was 34.

[b] The arithmetic average concentration of all the compound identification cases.

[c] The arithmetic average concentration of all the compound identification cases using half the MDL value for compounds not detected.

[d] The arithmetic average concentration of all the compound identification cases using zero for compounds not detected.

TABLE 11-23. 1988 UATMP COMPOUND IDENTIFICATIONS WITH GC/MD FOR SAIL

Compound	Cases[a] ≥ MDL	Concentration, ppbv				
		Minimum	Maximum	Mean[b]	Mean[c]	Mean[d]
Acetylene	2	3.37	5.75	4.56	1.31	0.91
1,3-Butadiene	5	0.24	0.44	0.32	0.19	0.16
Chloroethane	3	0.40	1.59	0.85	0.29	0.25
Methylene chloride	2	1.05	2.93	1.99	0.15	0.10
trans-1,2-Dichloroethylene	3	0.21	0.31	0.26	0.04	0.02
Chloroprene	5	0.11	2.64	0.89	0.17	0.14
Bromochloromethane	2	0.06	0.29	0.18	0.01	0.01
Chloroform	2	5.01	38.74	21.88	1.12	1.12
1,1,1-Trichloroethane	25	0.03	9.00	1.91	1.22	1.22
1,2-Dichloroethane	15	0.29	10.61	3.38	1.31	1.30
Benzene/1,2-dichloroethane	15	0.80	30.04	9.78	3.79	3.76
Benzene	25	0.15	25.31	5.31	3.41	3.41
Trichloroethylene	11	0.26	6.35	1.78	0.50	0.50
1,2-Dichloropropane	3	0.03	1.01	0.66	0.07	0.05
trans-1,3-Dichloropropylene	1	0.34	0.34	0.34	0.03	0.01
Toluene	38	0.36	95.11	4.38	4.27	4.27
n-Octane	12	0.03	2.52	0.50	0.16	0.15
n-Octane/trans-1,3-dichloropropylene	2	0.70	1.80	1.25	0.10	0.06
cis-1,3-dichloropropylene	5	0.09	1.61	0.49	0.08	0.06
1,1,2-Trichloroethane	5	0.11	0.73	0.37	0.06	0.05
Tetrachloroethylene	4	0.06	0.42	0.19	0.05	0.02
Chlorobenzene	23	0.06	4.96	1.49	0.88	0.88
Ethylbenzene	16	0.16	8.32	2.55	1.41	1.40
m/p-Xylene	39	0.10	57.36	8.45	8.45	8.45
Styrene/o-Xylene	29	0.09	22.87	2.20	1.64	1.64
Bromoform	1	0.02	0.02	0.02	0.001	0.0005
1,1,2,2-Tetrachloroethane	1	0.01	0.01	0.01	0.001	0.0003
m-Dichlorobenzene	6	0.06	1.02	0.47	0.08	0.07
p-Dichlorobenzene	17	0.66	28.62	10.33	4.53	4.50
o-Dichlorobenzene	4	1.53	4.75	3.20	0.34	0.33

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[a] The number of samples in which the compound was identified. The total number of samples analyzed was 39.

[b] The arithmetic average concentration of all the compound identification cases.

[c] The arithmetic average concentration of all the compound identification cases using half the MDL value for compounds not detected.

[d] The arithmetic average concentration of all the compound identification cases using zero for compounds not detected.

be below the MDL. In the next to the last column, means are computed assuming half the MDL for all those species in which no concentration was measured. In the last column, means are computed assuming the concentration of these undetected species is zero.

11.3 PRECISION

Analytical precision was estimated by comparing analytical results for repeated, or replicate, analyses of site samples. The overall precision results are given in Table 11-24 for all compounds and all sites. The "mean" in Table 11-24 refers to the average concentration for the replicate pair analysis for a given compound. The "average" in Table 11-24 is the arithmetic mean of the concentration means of all replicate pairs. The range of concentrations of the means was found to be from 0.04 to 38.18 ppbv. Because of the wide range, the precision reported in Table 11-24 gives a realistic assessment of the performance of the analytical portion of the method. Statistics are given for the standard deviation, the percent coefficient of variation, and the absolute percent difference. The precision results average 14.0% in terms of average percent coefficient of variation and 19.9% in terms of average absolute percent difference. These are excellent results combining the precision for 38 compounds and 19 sites. These results should be viewed as a measure of analytical precision and not the total method precision.

Sampling and analysis precision is summarized in Table 11-25 and was calculated from analyses of duplicate samples. The data in the table include the analytical results from all the sites and all the target compounds. The average percent coefficient of variation and absolute percent difference are 14.5% and 20.5%, respectively. These values are slightly larger than the corresponding results for replicate analyses because the duplicate values include the sum of the sampling and analytical error.

11.4 ACCURACY

Accuracy for the GC/MD analysis was measured in terms of external audits received from the Environmental Monitoring Systems Laboratory (EMSL), Quality Assurance Division (QAD) of the U. S. EPA at Research Triangle Park, North Carolina. Seven analytical audits were conducted in 1988, approximately one each month beginning in March 1988. Both the GC/MD and GC/MS analytical systems were subject to the audits.

TABLE 11-24. 1988 UATMP OVERALL PRECISION FOR REPLICATE PAIRS

Replicate Pair Statistic[a]	Minimum	Maximum	Average
Mean, ppbv	0.04	38.18	2.21
Standard Deviation, ppbv	0.00	4.56	0.22
% Coefficient of Variation	0.00	116.20	14.04
Absolute % Difference	0.00	164.33	19.86

[a] 518 compound identifications made in the replicate pair analyses.

TABLE 11-25. 1988 UATMP OVERALL PRECISION FOR DUPLICATE PAIRS

Duplicate Pair Statistic[a]	Minimum	Maximum	Average
Mean, ppbv	0.03	227.48	2.54
Standard Deviation, ppbv	0.00	143.99	0.59
% Coefficient of Variation	0.00	130.88	14.51
Absolute % Difference	0.00	185.09	20.52

[a] 498 compound identifications made in the duplicate pair analyses.

During the period from Audits 1 through 4, accuracy (or percent bias) was frequently greater than 30%. After comparing the reported audit results to the actual amounts added to the audit sample, the inaccuracy was attributed to erroneous calibration concentrations. The working standards were, at this time, being prepared in-house from individual pure compounds. To improve the accuracy vendor certified (±5%) gas standards were purchased and a dynamic flow dilution apparatus was developed to generate in-house calibration standards. This procedure greatly improved the audit results and brought the percent bias well within the ±30% range.

For Audits 5, 6, and 7 the biases for the UATMP target compounds averaged 0.1%, 6.9%, and 4.9%, respectively, for the GC/MD analyses. Bias results for GC/MS averaged -0.2%, 6.7%, and 12.3%, respectively.

Details of the audits are given in Section 14.7.

11.5 GC/MS COMPOUND IDENTIFICATION CONFIRMATION RESULTS

Compounds were identified by the GC/MD analytical system using a combination of retention time, photoionization detector/flame ionization detector (PID/FID) ratio, electron capture detector/flame ionization detector (ECD/FID) ratio, and detector specificity. Compound identification confirmation was accomplished by analyzing about 21% of the samples by GC/MS in the full scan and multiple ion detection (MID) modes. For all the analyses GC/MS confirmed 86.9% of the compound identifications made by GC/MD analyses. Confirmation was complicated during part of the program by acetonitrile interference in the GC/MD analyses related to the aldehyde collection portion of the sampler for some of the samples.

Further discussion of the compound identification procedure and results is given in Section 14.8.

12. UATMP DATA

The UATMP data were summarized in Section 11 by target compound and by site code. Appendix A contains the results of each analysis. This section will discuss some of the trends which appear in the 1988 data.

12.1 OVERALL RESULTS

In Table 11.3, the compounds identified for all sites were presented along with the percent frequency at which they were identified. Table 11.4 further groups the compounds by their range of frequency of occurrence. Benzene, toluene, and m/p-xylene were among the compounds identified in 100% to 70% of the UATMP samples. A closer look at the actual frequency of these three compounds reveals that while toluene and m/p-xylene occurred at a rate of 93.8 and 93.5 percent, respectively; benzene was identified in only 71.3 percent of cases. At this time, the reason for this trend is not apparent.

12.2 SITE-SPECIFIC RESULTS

Benzene, toluene, and m/p-xylene (BTX) were identified at all the UATMP sites more frequently than other target compounds. Figure 12-1 is an example of how the concentrations of these three compounds changed from October 1987 through September 1988 for Birmingham, Alabama (BHAL). The BTX concentration changes in BHAL are typical of the changes seen in the other site data for these compounds. The 24-hour concentrations of toluene and m/p-xylene track one another well and are about equal. The concentration of benzene is consistently lower than toluene and m/p-xylene. Three general patterns of behavior can be identified in Figure 12-1. From October 1987 through about March 1, 1988, BTX concentrations are quite variable, averaging 4 to 6 ppbv. From about March 1 through about May 1, the concentrations are roughly constant at an average of about 1.0 ppbv. From about May 1 through September 1988, the BTX concentrations track each other well, around 2.0 to 3.0 ppbv, and show moderate variability.

BENZENE, TOLUENE, AND M/P-XYLENE CONCENTRATIONS

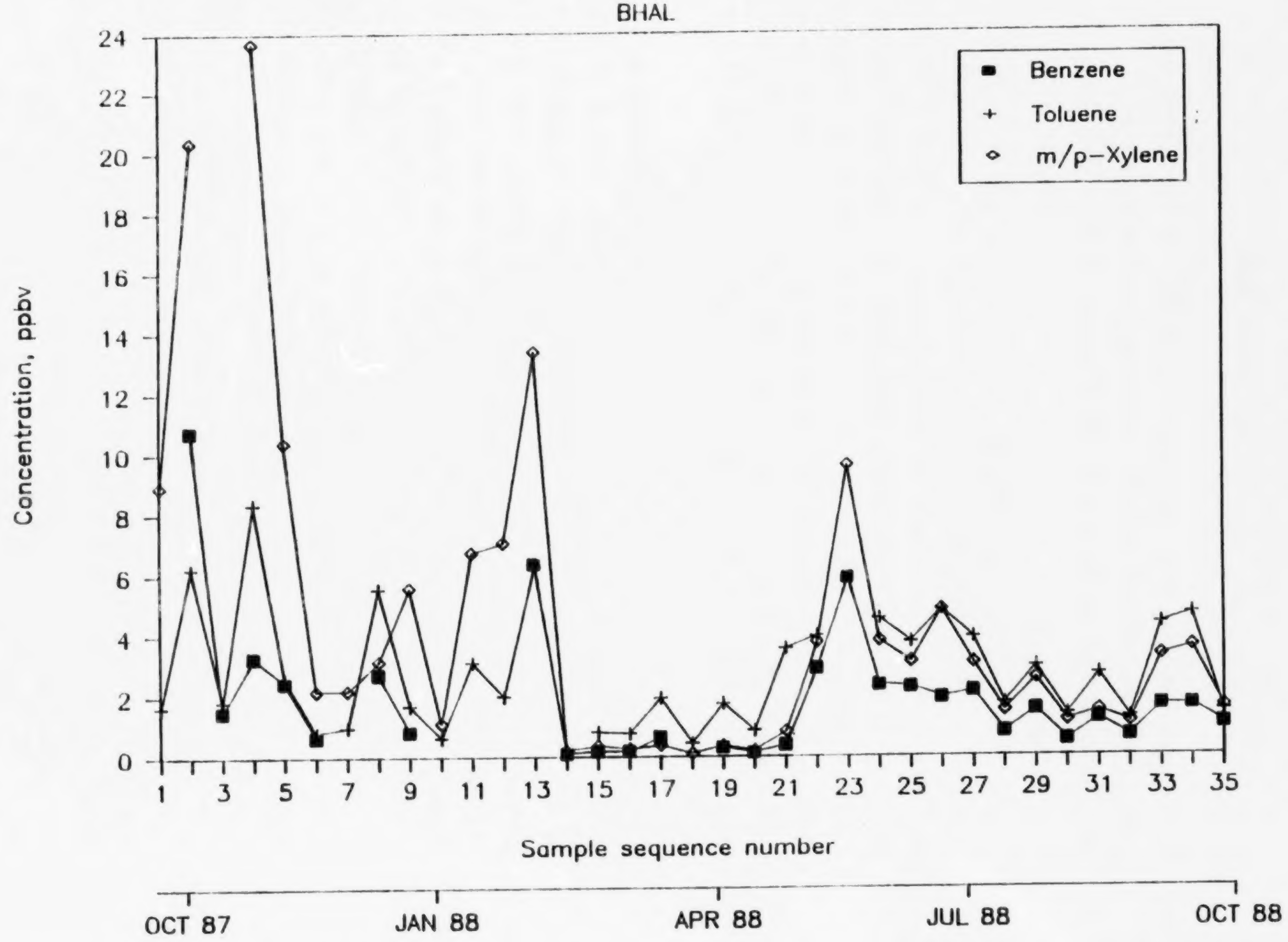


Figure 12-1. Benzene, toluene, and m/p-xylene concentration in BHAL 1988 UATMP samples.

Similar graphs are shown in Appendix B for all UATMP sites, including BHAL, and all display the same three patterns discussed above. The period of time between October 1987 and March 1988 may show more variability than later data because the GC/MD analytical methods were still being improved during that time. The data after March 1988 show much less variability from sample to sample and are representative of the ambient air samples at the UATMP sites during the later period of time.

The March 1 through May 1 time period of especially low BTX concentrations seems to vary from site to site, but is still identifiable. No reason for this trend in the data has been identified.

13. URBAN AIR TOXICS TECHNICAL NOTES

This section describes the sampling equipment used in the 1988 UATMP, its operation and certification; the sample interface, which takes a sample from the canister for injection into the analytical equipment; the generation of calibration standards; and the analytical equipment and procedures. Compound identification procedures are detailed, along with the GC/MS compound identification confirmation procedures. Finally, the UATMP canister cleanup procedure is described briefly.

13.1 SAMPLING EQUIPMENT

A perspective view of the UATMP sampler is given in Figure 13-1, while Figure 13-2 shows the detailed layout of the sample lines, flow controllers, and the other components of the UATMP sampler. The sampler was designed to obtain a 24-hour integrated ambient air sample in an evacuated stainless steel canister. Separate sample lines are used for the ambient air sample and for the aldehyde sample cartridges. The aldehyde sample lines are heated from the inlet to the aldehyde cartridges.

The aldehyde sample cartridges were prepared by an EPA Mobile Source Branch onsite contractor and sent to Radian Corporation's Research Triangle Park laboratory for shipment to the UATMP sites. Each aldehyde cartridge was given a unique serial number. Three cartridges, one blank and two duplicates, were enclosed with each canister sent to the sites. After ambient air sample collection was complete, site operators returned the aldehyde cartridges to the Radian laboratory in the canister shipment container along with sample canisters and sample custody records. The aldehyde cartridges were transferred for analysis to the EPA Environmental Monitoring Systems Laboratory (EMSL). The aldehyde results will be reported in a separate report.

The UATMP samplers were set to begin drawing air through the sample inlet and sample lines about 6 hours before the it was directed into the evacuated sample canister(s). This procedure ensured that once the flow in the

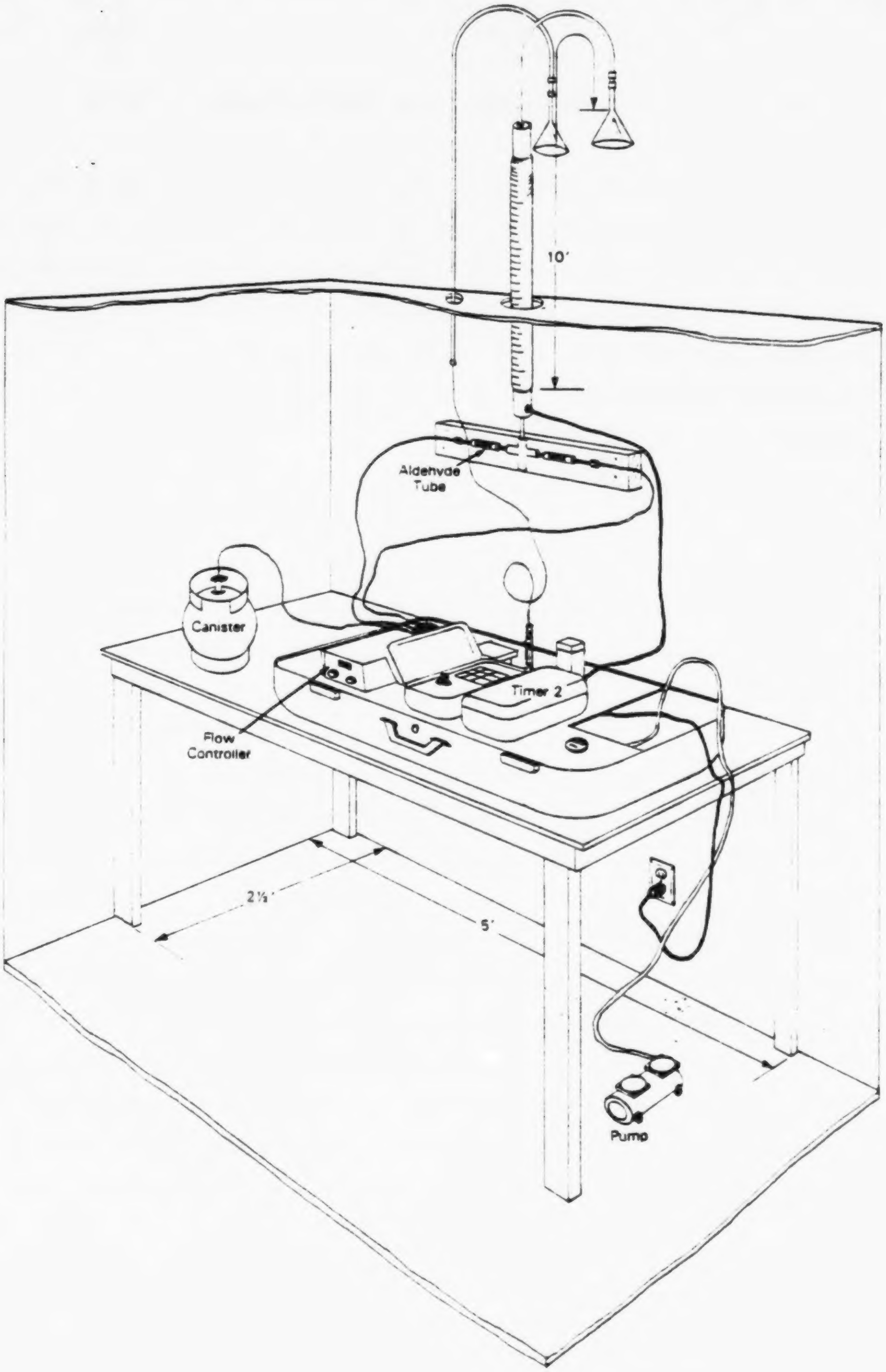

10′
Aldehyde Tube
Canister
Timer 2
Flow Controller
2½′
5′
Pump

Figure 13-1. Perspective view of UATMP sampler.

169242/R

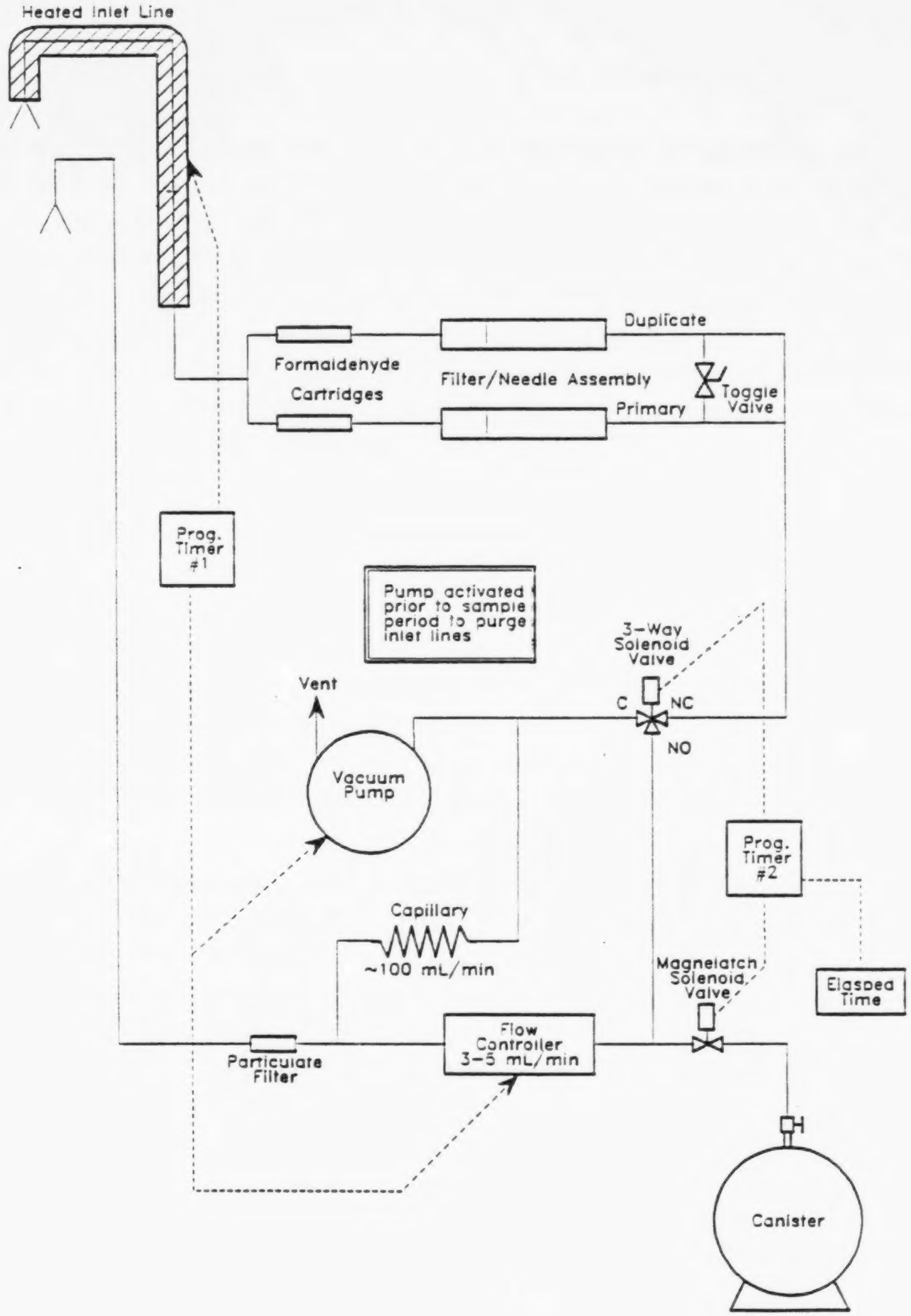

Heated Inlet Line
Duplicate
Formaldehyde Cartridges
Filter/Needle Assembly
Toggle Valve
Primary
Prog. Timer #1
Pump activated prior to sample period to purge inlet lines
3-Way Solenoid Valve
Vent
C
NC
NO
Vacuum Pump
Prog. Timer #2
Capillary
~100 mL/min
Magnelatch Solenoid Valve
Elapsed Time
Particulate Filter
Flow Controller 3-5 mL/min
Canister
1682404R

Figure 13-2. Sampling assembly for the UATMP.

sample line was directed into the canister, the sample line had been well purged with ambient air. The sample flow rate into the 6-L canister was controlled at approximately 3.5 mL/minute. The resulting pressure in the canister after 24 hours was approximately 1.0 to 5.0 inches mercury (Hg) vacuum. Section 14.5 presents and discusses the actual canister pressure distribution after the canisters were received in Radian Corporation's Research Triangle Park laboratory. The method of sampling operated on a slip-stream approach with the canister under vacuum (about 29.72 inches Hg vacuum) to avoid potential contamination from the pump.

13.1.1 Sampler Certification Blanks

Before the samplers were installed at the UATMP sites they were certified in Radian Corporation's Research Triangle Park laboratory. Certification consisted of purging the sampler with cleaned, humidified air, followed by collecting a sample of the cleaned, dried air that had been humidified through the purged UATMP samplers for GC/MD analysis. The purpose of the wet purge was to help remove any adherent contaminants from the sampler. The chromatograms from these certification sample analyses were archived for each sampler. Few target compounds, or other interfering compounds, remained in the gas stream after purging.

13.1.2 Sampler Certification Selected Target Compound Challenge

Following the UATMP sampler blank certification, a challenge gas containing eleven selected target compounds was passed through three of the samplers, chosen at random. The three samplers used were Sampler No. T-21, Sampler No. T-11, and Sampler No. T-10. The collected challenge gas samples were analyzed by GC/MD. The average concentration of the target compounds in the challenge gas was 12.2 ppbv.

Table 13-1 shows the percent bias calculated with the analysis of the challenge gas being used as a reference concentration. Percent bias ranged from -10.4% for chlorobenzene (from Sampler No. T-11) to +135.3% for

TABLE 13-1. 1988 UATMP SAMPLER CERTIFICATION BIAS

	Percent Bias			
Compound	Sampler T-21	Sampler T-11	Sampler T-10	Average
Chloroform	56.94	26.01	135.34	72.76
1,1,1-Trichloroethane	18.91	8.31	18.71	15.38
Carbon tetrachloride	18.15	15.39	21.75	18.43
Benzene	3.31	-4.63	-1.86	-1.06
Trichloroethylene	20.61	-3.45	-0.38	5.59
1,2-Dichloropropane	20.45	0.37	8.28	9.70
Toluene	5.28	-10.03	-8.24	-4.33
Tetrachloroethylene	57.52	7.96	10.02	25.17
Dibromochloromethane	81.75	3.39	7.07	30.74
Chlorobenzene	15.44	-10.37	-3.54	0.51
Styrene/o-xylene	41.31	7.90	39.12	29.44
Average Percent Bias	30.883	3.714	20.589	18.396

chloroform (from Sampler No. T-10), and averaged 18.4 percent. Sampler average biases ranged from 3.7% for Sampler No. T-11 to 30.9% for Sampler No. T-11. These samplers were assumed to be representative of all the UATMP samplers, and average bias in the range of about ±30% was considered satisfactory.

13.2 SAMPLE INTERFACE SYSTEM

Figure 13-3 shows the UATMP GC/MD system which includes the Sample Interface System, the Analytical System, and the Data System. Figure 13-4 diagrams the sample interface system. The upper part of Figure 13-4 shows the configuration of the interface system valve for the loading of sample through Trap 1 in which the sample is condensed (trapped) by being immersed in liquid argon.

The lower part of Figure 13-4 shows the sample interface system valve in the position for injecting the cryogenically trapped sample into the gas chromatograph. In the latter mode, the argon is removed from the trap, and the trap is heated.

The sample interface takes a constant volume sample of about 250 mL from the sample canister and preconcentrates the sample by cryogenic trapping (see Load Trap 1 in Figure 13-4). Following sample preconcentration, the 8-port sampling valve is placed in the inject position (Inject Trap 1 in Figure 13-4) and the sample trap is rapidly heated. Helium carrier gas transports the trapped sample directly onto the head of the column.

Initial calibration of the GC/MD system showed that the sample interface system provided a consistent sample volume with a precision (coefficient of variation) of less than 3 percent.

13.3 CALIBRATION STANDARDS GENERATION

Calibration standards were generated with a dynamic flow dilution apparatus. The flow dilution system used certified gases and diluted them with zero-grade air that had been routed through a catalytic oxidizer and then humidified with HPLC-grade water. The gases were mixed in a SUMMA®-treated mixing sphere and bled into evacuated canisters. One dilution stream was routed through a SUMMA®-treated bubbler containing HPLC-grade water to humidify it, and the other stream was not humidified. The dilution air streams were then brought together for mixing with the streams from three

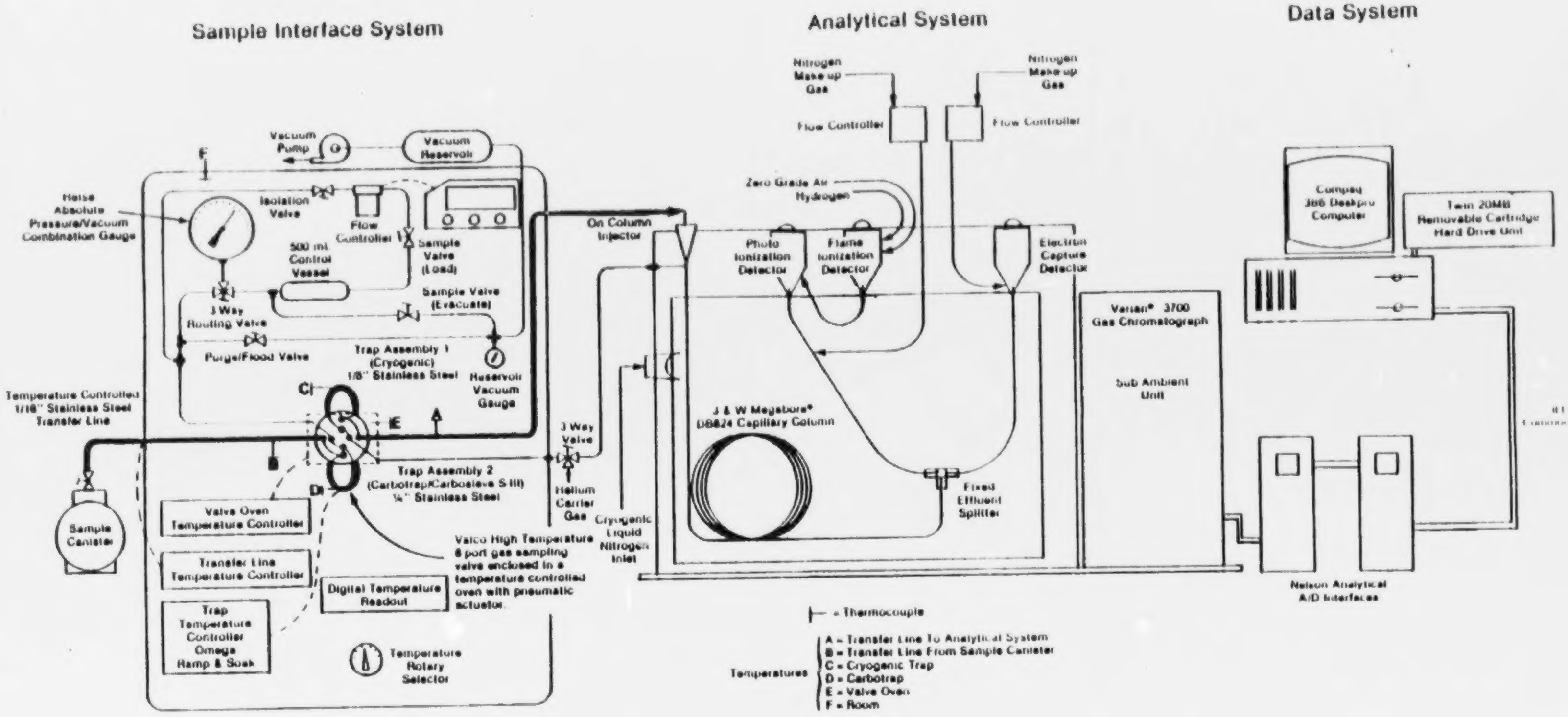
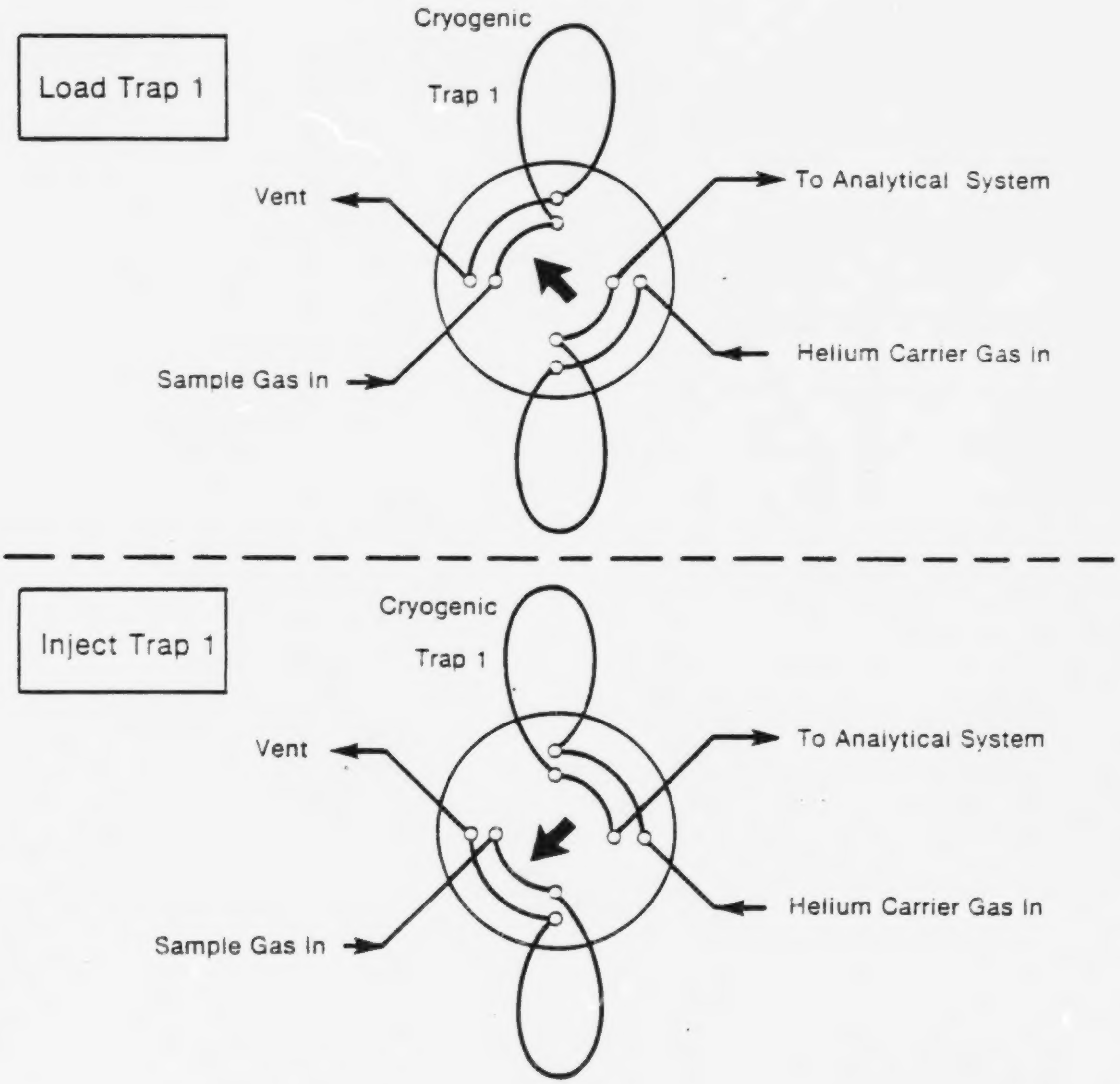

Sample Interface System
Analytical System
Data System
Vacuum Pump
Vacuum Reservoir
F
Heise Absolute Pressure/Vacuum Combination Gauge
Isolation Valve
Flow Controller
Sample Valve (Load)
500 ml Control Vessel
3 Way Routing Valve
Sample Valve (Evacuate)
Purge/Flood Valve
Trap Assembly 1 (Cryogenic) 1/8" Stainless Steel
Reservoir Vacuum Gauge
Temperature Controlled 1/16" Stainless Steel Transfer Line
C
E
A
B
D
Trap Assembly 2 (Carbotrap/Carbosieve S III) ¼" Stainless Steel
Sample Canister
Valve Oven Temperature Controller
Transfer Line Temperature Controller
Trap Temperature Controller Omega Ramp & Soak
Digital Temperature Readout
Valco High Temperature 8 port gas sampling valve enclosed in a temperature controlled oven with pneumatic actuator.
Temperature Rotary Selector
3 Way Valve
Helium Carrier Gas
Cryogenic Liquid Nitrogen Inlet
On Column Injector
Nitrogen Make up Gas
Flow Controller
Nitrogen Make up Gas
Flow Controller
Zero Grade Air
Hydrogen
Photo Ionization Detector
Flame Ionization Detector
Electron Capture Detector
J & W Megabore® DB624 Capillary Column
Fixed Effluent Splitter
Varian® 3700 Gas Chromatograph
Sub Ambient Unit
Compaq 386 Deskpro Computer
Twin 20MB Removable Cartridge Hard Drive Unit
Nelson Analytical A/D Interfaces
= Thermocouple
Temperatures
A = Transfer Line To Analytical System
B = Transfer Line From Sample Canister
C = Cryogenic Trap
D = Carbotrap
E = Valve Oven
F = Room

Figure 13-3. Gas chromatographic multidector system.


Load Trap 1
Cryogenic
Trap 1
Vent
To Analytical System
Sample Gas In
Helium Carrier Gas In
Inject Trap 1
Cryogenic
Trap 1
Vent
To Analytical System
Sample Gas In
Helium Carrier Gas In

Valve viewed from handle

9870533R

Figure 13-4. Sample interface system.

certified cylinders. Flow rates from all four streams (three from the certified cylinders, and one from the dilution cylinder) were gauged and controlled by mass flow controllers. The split air dilution streams were metered by "wet" and "dry" rotameters from the humidified and unhumidified dilution air streams respectively.

The system was evacuated with a vacuum pump while the closed canister was connected. A precision absolute pressure gauge measured the canister pressure before and after filling. The lines leading to the canister and to the mixing sphere were flushed for at least 15 minutes with standard gas before being connected to the canister for filling. A diagram of the apparatus is shown in Figure 13-5.

13.4 ANALYSIS

UATMP samples were analyzed for 38 target compounds by the GC/MD system. Having simultaneous detector responses from ECD, PID, and the FID allowed the analyst to identify target compounds with greater accuracy. Quantitation was done primarily using the FID response, although the ECD was used for quantitation of most halogenated compounds. Over 20% of the UATMP samples were also analyzed for compound identification confirmation by GC/MS operating in the full scan or MID mode.

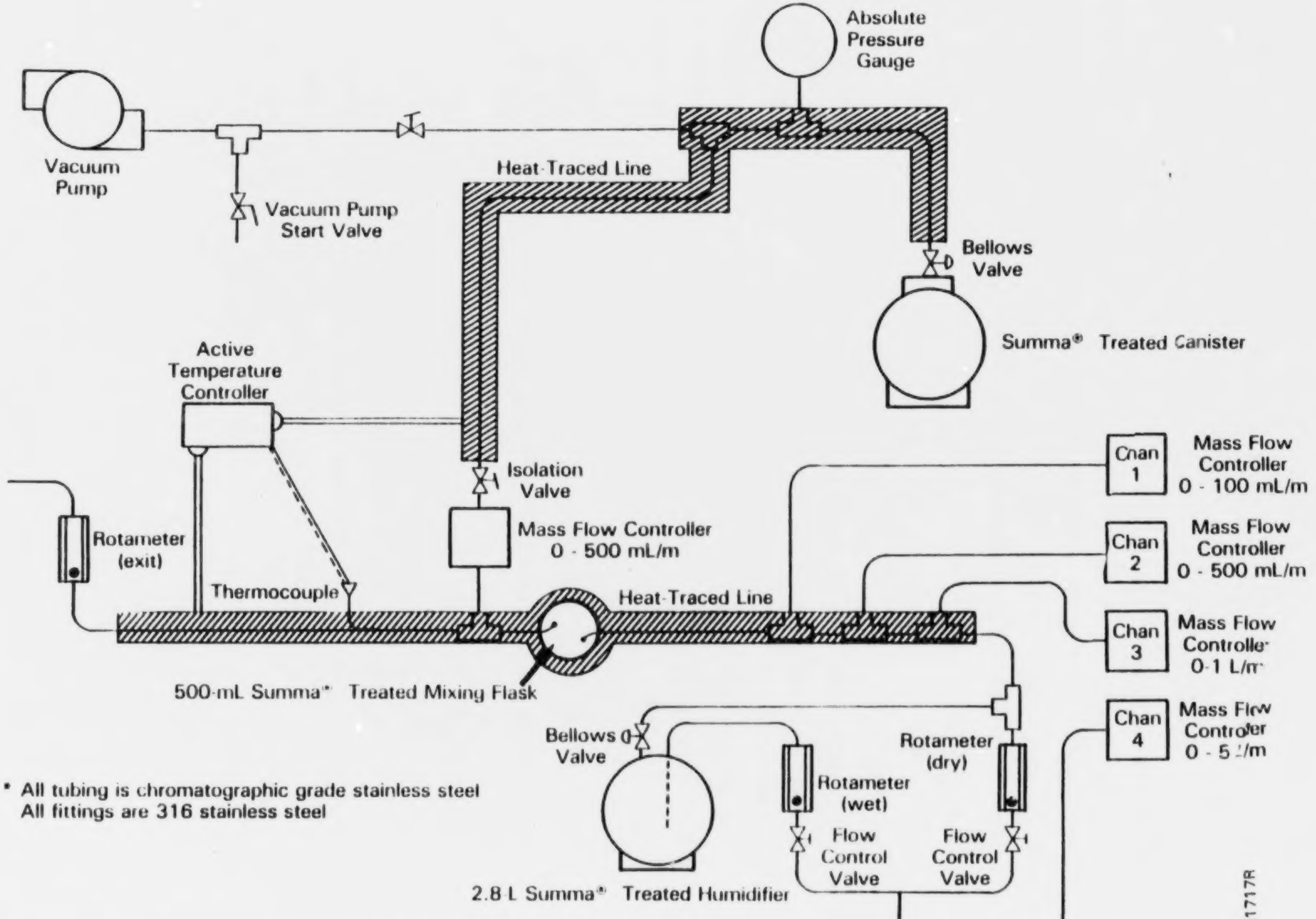
13.4.1 GC/MD Instrumentation

The gas chromatograph used with the multidetector system was a VARIAN 3700. Table 13-2 gives the GC/MD operating conditions. Figure 13-6 shows the multiple detector system arrangement.

The oven, which contains the DB-624 capillary column, is cooled to -30°C with liquid nitrogen at the beginning of the sample injection. The -30°C temperature is held for 1 minute and then the temperature is increased at the rate of 3°C per minute to a final temperature of 180°C. The gas eluting from the DB-624 capillary column goes through a 1:10 fixed splitter which divides the flow to the ECD and the PID/FID. The smaller gas stream from the splitter goes to the ECD, while the larger fraction goes first to the PID and then the FID.

13.4.2 GC/MS Instrumentation

One hundred eighteen UATMP samples were analyzed by GC/MS using a FINNIGAN OWA 1050 and 4510 operating in the full scan and MID mode. The full


Absolute
Pressure
Gauge
Vacuum
Pump
Vacuum Pump
Start Valve
Heat-Traced Line
Bellows
Valve
Summa® Treated Canister
Active
Temperature
Controller
Isolation
Valve
Mass Flow Controller
0 - 500 mL/m
Rotameter
(exit)
Thermocouple
Heat-Traced Line
500-mL Summa® Treated Mixing Flask
Chan
1
Mass Flow
Controller
0 - 100 mL/m
Chan
2
Mass Flow
Controller
0 - 500 mL/m
Chan
3
Mass Flow
Controller
0-1 L/m
Chan
4
Mass Flow
Controller
0 - 5 L/m
Bellows
Valve
Rotameter
(dry)
Rotameter
(wet)
Flow
Control
Valve
Flow
Control
Valve
2.8 L Summa® Treated Humidifier
1181717R

* All tubing is chromatographic grade stainless steel
All fittings are 316 stainless steel

Figure 13-5. Dynamic flow dilution apparatus.

TABLE 13-2. 1988 UATMP GC/MD OPERATING CONDITIONS

J&W Megabore® DB-624 Capillary Column:

Length : 30 m
Inside Diameter : 0.53 mm
Oven Temperature: -30°C for one minute
Temperature programmed at 3°C/minute to 180°C

Detector Temperatures:

FID: 250°C
PID: 225°C
ECD: 250°C

Injector Oven Temperature: 200°C

Gas Flow Rates:

Helium Carrier Gas: 7 mL/min
N_2 Make-up : 23 mL/min
H_2 to FID : 30 mL/min
Air to FID : 300 mL/min

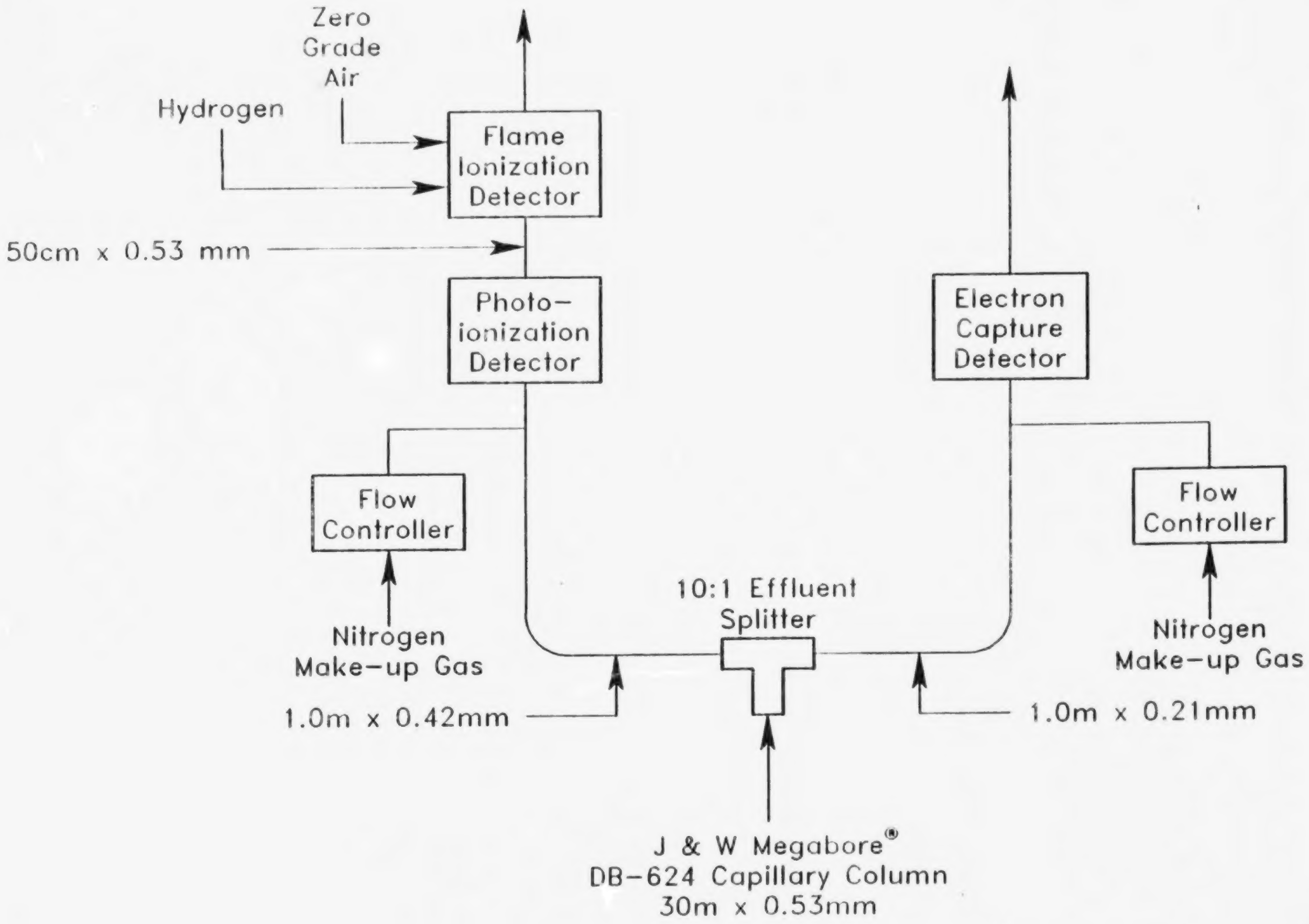

Zero Grade Air
Hydrogen
Flame Ionization Detector
50cm x 0.53 mm
Photo-ionization Detector
Electron Capture Detector
Flow Controller
Flow Controller
10:1 Effluent Splitter
Nitrogen Make-up Gas
Nitrogen Make-up Gas
1.0m x 0.42mm
1.0m x 0.21mm
J & W Megabore®
DB-624 Capillary Column
30m x 0.53mm
1592424R

Figure 13-6. UATMP multiple detector system.

scan mode was originally used to detect unknown compounds. The MID mode was subsequently used to obtain more sensitivity which lowered the estimated MDLs. In order to make the instrument sensitivity (and MDLs) approximately equivalent to the sensitivity of the GC/MD system, a 500-mL sample (at room temperature and barometric pressure) was taken by the GC/MS sample interface system.

13.5 CANISTER CLEANUP

The sample canister cleanup system used for the 1988 UATMP is the same as the one described in the 1988 Quality Assurance Project Plan (QAPP) and the 1988 NMOC Monitoring Program.[1,9] The canister cleanup system is shown in Figure 13-7. The canister cleanup procedure used for the UATMP sample canisters was the same as the cleanup procedure for the NMOC canisters, and was described in Section 3.3.2 of Volume I of this report.[9]

A bank of eight canisters was connected to each manifold shown in Figure 13-7. The valve on each canister was opened, with the shutoff valves and the bellows valves closed. The vacuum pump was started and one of the bellows valves was opened, drawing a vacuum on the canisters connected to the corresponding manifold. After reaching 5 mm Hg absolute pressure as indicated on the absolute pressure gauge, the vacuum was maintained for 15 minutes. The bellows valve was then closed and cleaned, dried air that had been humidified at about 80% humidity was introduced to the evacuated canisters until the pressure reached 20 psig. The canisters were filled from the clean air system at the rate of 6.0 L/min. This flow rate was recommended by the manufacturer as the highest flow rate at which the catalytic oxidizers eliminate hydrocarbons with a minimum 99.7% efficiency.

When the first manifold had completed the evacuation phase and was being pressurized, the second manifold was then subjected to vacuum by opening its bellows valve. After 15 minutes, the second manifold was isolated from the vacuum and connected to the clean, dried air that had been humidified. The first manifold of canisters was then taken through a second cycle of evacuation and pressurization. Each manifold bank of eight canisters was subjected to two cleanup cycles.

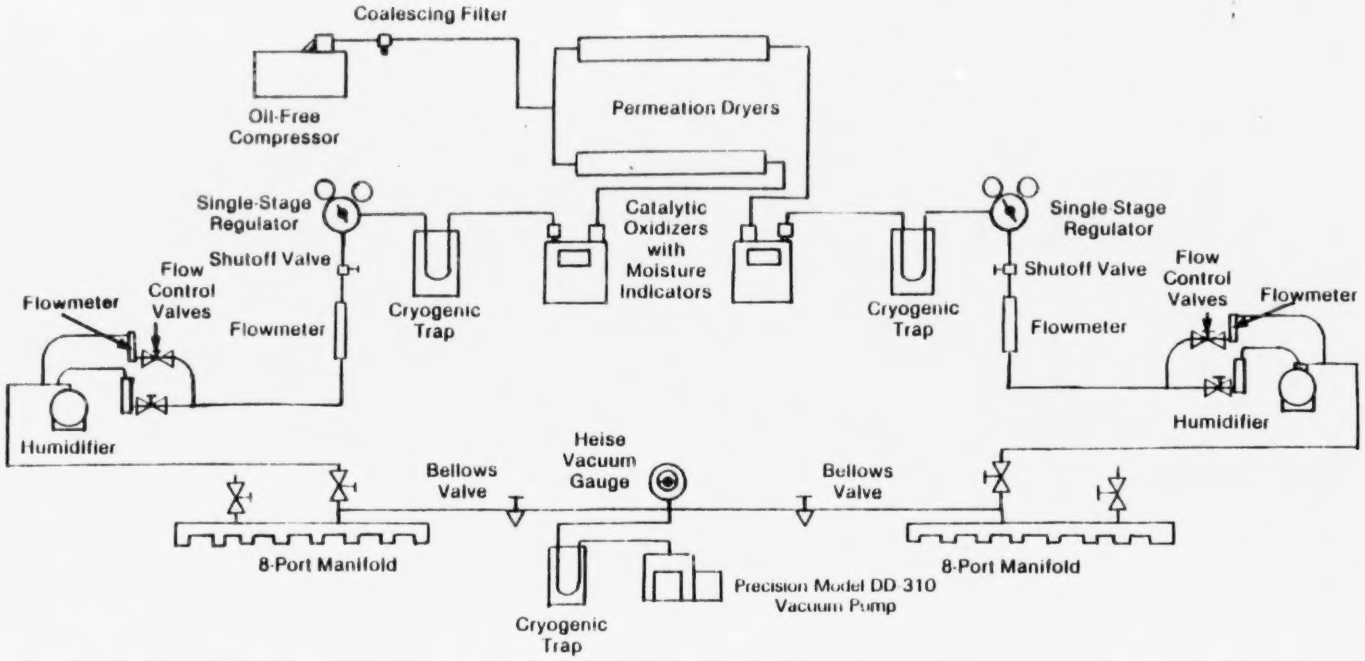

Coalescing Filter
Oil-Free Compressor
Permeation Dryers
Catalytic Oxidizers with Moisture Indicators
Single-Stage Regulator
Shutoff Valve
Flow Control Valves
Flowmeter
Flowmeter
Cryogenic Trap
Humidifier
Cryogenic Trap
Single-Stage Regulator
Shutoff Valve
Flow Control Valves
Flowmeter
Flowmeter
Humidifier
Heise Vacuum Gauge
Bellows Valve
Bellows Valve
8-Port Manifold
8-Port Manifold
Cryogenic Trap
Precision Model DD 310 Vacuum Pump

Figure 13-7. Canister cleanup apparatus.

6870254R

During the second cleanup cycle, the canisters were pressurized to 20 psig with clean, dried air that had been humidified. For each bank of eight canisters, the canister having the highest precleanup NMOC concentration was selected for NMOC blanking analysis to determine potential hydrocarbon residues. If the analysis measured less than 0.030 ppmC, then the eight canisters on the manifold were considered clean. Finally the canisters were again evacuated to 5 mm Hg pressure absolute, capped under vacuum, and then packed in the containers used for shipping to the field sites.

14. QUALITY ASSURANCE/QUALITY CONTROL PROCEDURES AND RESULTS

This section describes the quality assurance (QA) and quality control (QC) procedures and results for the 1988 UATMP. During this time period the sampling and analytical methods for the measurement of 38 target compounds in ambient air in the range of about 0.1 to 10 ppbv were still being qualified and refined. The methods described in this report and the results presented represent state-of-the-art technology. In the Quality Assurance Project Plan[1] for the 1988 UATMP, few quality objectives could be specified because the technology for sampling and analysis had not been demonstrated prior to this program. The quality results of the 1988 UATMP provide a basis for setting quality objectives for future UATMP. Sampling and analytical procedures and QA methods will continue to be refined and improved, but as the following sections will show, the quality of the results of the 1988 UATMP is excellent and the program has provided reliable data for 38 air toxics target compounds.

14.1 INTRODUCTION

The primary quality assurance objectives for the 1988 UATMP include completeness, precision, and accuracy. In addition, compound identification confirmation procedures, sample custody procedures and records were developed. Canister pressures and their distribution demonstrated the effectiveness of the sampler operation and equipment.

Carryover of target compounds from one sample canister to the next was investigated to indicate the effectiveness of the canister cleanup procedure. Other topics covered in this section include calibration and analytical method detection limits, data validation procedures, and program record storage and accessibility.

14.2 CALIBRATION AND INSTRUMENT PERFORMANCE

The GC/MD analytical system uses one column and three detectors. The detectors received sample components after gas chromatographic separation by splitting the sample 1:10. The smaller fraction (10%) from the effluent goes to the ECD. The larger fraction (90%) goes to the PID, which is in series with FID.

The analog signal from each of the detectors is converted to digital data by a Nelson analog-to-digital (A/D) interface. The digital information is automatically sent, either real time or post run, to a microcomputer where it is processed and stored on fixed disk. Four ASCII files are created by the software; they are the method file (.MET), the header file (.HDR), the raw data file (.PTS), and the area table file (.ATB). In addition, an external standard area file is generated from header and raw data information from analysis of standards. The area table file includes header information, peak number, retention time, peak name, concentration, peak area, peak height, peak area/height ratio, the reference peak number for the named peaks, delta retention time, and response factor.

Calibration gases are generated by dynamically diluting gas streams from certified (±5% accuracy) cylinders containing the 38 UATMP target compounds obtained from Scott Specialty Gases, Inc. In-house standard calibration gases are generated by the flow dilution apparatus and stored in SUMMA®-polished stainless steel canisters. The initial instrument calibration range was 1.0 to 20 ppbv for each of the target compounds. Daily calibration was done with in-house standards made from the Scott certified gases with average concentrations of 10 ppbv.

All the calibration data were used to calculate calibration factors for each UATMP target compound. These calibration factors were used for quantitation. Tables 14-1 through 14-3 summarize the calibration factors for the FID, PID, and ECD, respectively. The FID calibration factors were used for quantitation of the majority of compounds, with the exception of the halogenated compounds. The ECD calibration factors were used in most cases of halogenated compound quantitation due to its greater sensitivity at low concentrations.

Estimated method detection limits (MDLs) for the GC/MD and GC/MS analytical systems are given in Table 14-4. These MDLs were achieved using a sample size for the GC/MD of about 250 mL, at laboratory temperature and pressure. These detection limits were estimated for both GC/MD and GC/MS using an area count that could be detected on the FID and ECD and multiplying it by the response factor for each compound. These results are approximately three times the instrument noise level. In order to make the sensitivity of

TABLE 14-1. 1988 UATMP CALIBRATION DATA FOR FLAME IONIZATION DETECTOR

Compound	Calibration Factor, ppbv/a.c.			Standard Deviation ppbv/a.c.	% CV
	Minimum	Maximum	Mean		
1,1,1-Trichloroethane	8.69E-05	1.19E-04	1.02E-04	5.46E-06	5.34
1,1,2,2-Tetrachloroethane	1.06E-04	1.58E-04	1.19E-04	8.09E-06	6.81
1,1,2-Trichloroethane	1.03E-04	1.18E-04	1.04E-04	3.47E-06	3.33
1,1-Dichloroethane	1.00E-04	1.23E-04	1.07E-04	3.55E-06	3.32
1,2-Dichloroethane	1.11E-04	1.50E-04	1.22E-04	1.12E-05	9.23
1,2-Dichloropropane	7.32E-05	9.49E-05	7.40E-05	3.12E-06	4.22
1,3-Butadiene	7.51E-05	1.58E-04	7.71E-05	1.68E-05	21.83
Acetylene	7.86E-05	2.01E-04	1.77E-04	2.62E-05	14.81
Bromochloromethane	2.42E-04	2.78E-04	2.73E-04	8.64E-06	3.16
Bromodichloromethane	2.43E-04	2.74E-04	2.59E-04	4.50E-06	1.74
Benzene	3.43E-05	4.81E-05	3.70E-05	3.60E-06	9.74
Bromoform	2.12E-04	2.84E-04	2.75E-04	9.96E-06	3.62
Bromomethane	1.88E-04	1.99E-04	1.93E-04	2.48E-06	1.28
cis-1,3-Dichloropropylene	8.14E-05	1.05E-04	8.44E-05	5.97E-06	7.07
Carbon tetrachloride	2.55E-04	3.41E-04	2.62E-04	1.43E-05	5.44
Chlorobenzene	4.15E-05	4.82E-05	4.64E-05	1.03E-06	2.22
Chloroethane	9.26E-05	4.81E-04	3.10E-04	1.85E-04	59.56
Chloroform	2.61E-04	4.03E-04	2.91E-04	3.03E-05	10.41
Chloromethane	1.53E-04	2.42E-04	1.94E-04	1.20E-05	6.15
Chloroprene	1.06E-04	1.55E-04	1.17E-04	1.41E-05	12.04
Dibromochloromethane	3.31E-04	3.51E-04	3.39E-04	3.65E-06	1.08
Ethylbenzene	3.26E-05	3.87E-05	3.29E-05	9.93E-07	3.02
m/p-Xylene	6.21E-05	9.81E-05	6.34E-05	5.03E-06	7.93
m-Dichlorobenzene	3.38E-05	5.03E-05	3.95E-05	3.44E-06	8.70
Methylene chloride	2.33E-04	5.56E-04	2.54E-04	5.17E-05	20.37
n-Octane	4.26E-05	6.16E-05	4.31E-05	2.84E-06	6.59
o-Dichlorobenzene	4.13E-05	6.37E-05	4.89E-05	4.73E-06	9.68
p-Dichlorobenzene	1.29E-04	2.26E-04	1.55E-04	2.94E-05	18.99
Propylene	6.40E-05	9.92E-05	8.53E-05	5.78E-06	6.77
Styrene/o-xylene	4.07E-05	4.89E-05	4.11E-05	1.27E-06	3.09
trans-1,2-Dichloroethylene	1.05E-04	2.31E-04	1.16E-04	1.77E-05	15.19
trans-1,3-Dichloropropylene	1.04E-05	1.06E-04	1.04E-04	3.12E-07	0.30
Tetrachloroethylene	1.04E-04	1.54E-04	1.06E-04	7.00E-06	6.64
Toluene	3.95E-05	5.45E-05	4.01E-05	2.19E-06	5.45
Trichloroethylene	1.26E-04	1.70E-04	1.28E-04	6.32E-06	4.92
Vinyl chloride	1.21E-04	1.64E-04	1.36E-04	7.97E-06	5.88

TABLE 14-2. 1988 UATMP CALIBRATION DATA FOR PHOTOIONIZATION DETECTOR

Compound	Calibration Factor, ppbv/a.c.			Standard Deviation ppbv/a.c.	% CV
	Minimum	Maximum	Mean		
1,3-Butadiene	5.94E-05	6.12E-05	5.99E-05	8.58E-07	1.43
Benzene	4.18E-05	4.32E-05	4.22E-05	6.60E-07	1.56
cis-1,3-Dichloropropylene	6.64E-05	1.04E-04	8.09E-05	1.88E-05	23.21
Chlorobenzene	2.83E-05	2.95E-05	2.86E-05	5.54E-07	1.94
Chloroprene	6.11E-05	6.30E-05	6.16E-05	9.21E-07	1.49
Ethylbenzene	3.13E-05	3.37E-05	3.16E-05	5.50E-07	1.74
m/p-Xylene	5.19E-05	5.43E-05	5.25E-05	1.07E-06	2.04
m-Dichlorobenzene	2.13E-05	2.20E-05	2.15E-05	3.46E-07	1.61
n-Octane	1.53E-04	1.72E-04	1.66E-04	8.77E-06	5.28
o-Dichlorobenzene	3.19E-05	3.29E-05	3.22E-05	4.57E-07	1.42
p-Dichlorobenzene	7.53E-05	7.87E-05	7.63E-05	1.55E-06	2.03
Propylene	1.04E-04	1.09E-04	1.05E-04	2.08E-06	1.97
Styrene/o-xylene	3.46E-05	3.61E-05	3.50E-05	6.32E-07	1.80
trans-1,2-Dichloroethylene	3.47E-05	3.57E-05	3.54E-05	1.82E-07	0.51
trans-1,3-Dichloropropylene	6.86E-05	7.33E-05	7.03E-05	1.82E-06	2.60
Tetrachloroethylene	3.45E-05	3.64E-05	3.49E-05	7.83E-07	2.24
Toluene	3.52E-05	3.54E-05	3.53E-05	5.21E-08	0.15
Trichloroethylene	6.15E-05	6.37E-05	6.21E-05	9.39E-07	1.51
Vinyl chloride	2.69E-04	2.77E-04	2.71E-04	3.23E-06	1.19

TABLE 14-3. 1988 UATMP CALIBRATION DATA FOR ELECTRON CAPTURE DETECTOR

Compound	Calibration Factor, ppbv/a.c.			Standard Deviation ppbv/a.c.	% CV
	Minimum	Maximum	Mean		
1,1,1-Trichloroethane	1.52E-05	2.00E-05	1.76E-05	1.30E-06	7.35
1,1,2,2-Tetrachloroethane	1.64E-05	2.05E-05	1.71E-05	1.37E-06	8.01
1,1,2-Trichloroethane	1.64E-04	2.78E-04	1.83E-04	3.06E-05	16.70
1,2-Dichloropropane	6.77E-04	9.50E-04	8.68E-04	6.14E-05	7.08
Bromochloromethane	4.95E-05	6.21E-05	5.13E-05	3.40E-06	6.62
Bromodichloromethane	8.28E-06	9.90E-06	8.51E-06	4.68E-07	5.50
Bromoform	8.96E-06	1.13E-05	9.37E-06	7.42E-07	7.92
Bromomethane	4.53E-04	6.13E-04	4.92E-04	3.51E-05	7.14
cis-1,3-Dichloropropylene	5.60E-05	9.37E-05	8.12E-05	1.14E-05	14.07
Carbon tetrachloride	3.46E-06	4.88E-06	4.38E-06	2.42E-07	5.53
Chloroform	5.14E-05	6.42E-05	5.53E-05	4.56E-06	8.25
Dibromochloromethane	4.99E-06	6.27E-06	5.25E-06	4.35E-07	8.28
m-Dichlorobenzene	2.22E-04	3.01E-04	2.64E-04	1.63E-05	6.19
Methylene chloride	8.55E-04	9.31E-04	9.01E-04	2.06E-05	2.29
o-Dichlorobenzene	2.13E-04	4.53E-04	3.83E-04	3.94E-05	10.31
p-Dichlorobenzene	2.39E-04	2.86E-03	1.97E-03	4.75E-04	24.12
trans-1,3-Dichloropropylene	1.13E-04	1.61E-04	1.18E-04	9.41E-06	7.97
Tetrachloroethylene	4.10E-06	4.90E-06	4.34E-06	1.83E-07	4.21
Trichloroethylene	3.68E-05	4.90E-05	4.21E-05	1.97E-06	4.67

TABLE 14-4. 1988 UATMP ESTIMATED METHOD DETECTION LIMITS,[a] GC/MD AND GC/MS

		GC/MS		
Compound	GC/MD ppbv	First Quarter[b] ppbv	Second and Third Quarter ppbv	Fourth Quarter ppbv
Acetylene	1.00	--	--	--
Propylene	0.10	1.5	0.006	--
1,3-Butadiene	0.10	40.0	--	0.50
Vinyl chloride	0.20	1.0	0.54	0.17
Chloromethane	0.20	1.0	0.72	0.18
Chloroethane	0.10	1.6	1.38	0.30
Bromomethane	0.20	0.6	0.13	0.11
Methylene chloride	0.11	0.5	0.42	0.14
trans-1,2-Dichloroethylene	0.04	0.3	0.48	0.10
1,1-Dichloroethane	0.04	0.3	0.33	0.07
Chloroprene	0.06	2.0	0.50	0.12
Bromochloromethane	0.003	0.4	0.39	0.10
Chloroform	0.006	0.3	0.11	0.05
1,1,1-Trichloroethane	0.001	0.3	0.51	0.05
Carbon tetrachloride	0.001	0.2	0.60	0.05
1,2-Dichloroethane	0.04	0.3	0.78	0.11
Benzene	0.04	0.2	0.60	0.05
Trichlorethylene	0.004	0.3	0.19	0.06
1,2-Dichloropropane	0.04	0.4	0.57	0.11
Bromodichloromethane	0.001	0.5	0.45	0.03
trans-1,3-Dichloropropylene	0.04	0.4	0.51	0.07
Toluene	0.02	0.3	0.24	0.06
n-Octane	0.03	0.5	0.50	0.13
cis-1,3-Dichloropropylene	0.04	0.6	0.39	0.05
1,1,2-Trichloroethane	0.04	0.4	0.51	0.06
Tetrachloroethylene	0.07	0.4	0.19	0.05
Dibromochloromethane	0.001	0.2	0.51	0.03
Chlorobenzene	0.02	0.2	0.14	0.05
Ethylbenzene	0.02	--	0.48	0.03
m/p-Xylene	0.04	0.6	0.63	0.07
Styrene	0.02	0.3	0.22	0.05
o-Xylene	0.02	2.7	0.72	0.05
Bromoform	0.001	0.2	0.10	0.03
1,1,2,2-Tetrachloroethane	0.002	0.2	0.45	0.03
m-Dichlorobenzene	0.02	0.2	0.13	0.03
p-Dichlorobenzene	0.09	0.2	0.15	0.09
o-Dichlorobenzene	0.02	0.2	0.12	0.04

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[a] Detection limits estimated using minimum detectable area count and response factor for each compound. These estimates are approximately three times the detection noise level.

[b] GC/MS operated in the full scan mode in the first quarter; thereafter GC/MS operated in the MID mode.

the GC/MS similar to that of the GC/MD, the sample size was increased to about 500 mL, and the GC/MS was operated in the MID mode.

14.3 ANALYTICAL PRECISION FROM REPLICATE ANALYSES

Analytical precision was estimated by replicate or repeated analyses of selected UATMP ambient air samples. Table 14-5 shows precision statistics overall and on a quarterly basis. "Mean" in Table 14-5 refers to the average concentration of the replicate pair, and is tabulated over all compounds. The quarterly mean concentration values ranged from a high of 3.49 ppbv in the third quarter 1987 to a low of 0.91 ppbv in the second quarter of 1988. The average absolute percent difference for all UATMP compounds in all samples was 19.80 percent.

The replicate statistics by compound are shown in Table 14-6. The table shows that the mean absolute percent differences above 40% occur with compounds having six, or fewer, replicate pairs. The absolute average percent difference appears as a function of average concentration in Figure 14-1. The graph clearly demonstrates that the imprecision increases dramatically below 5 ppbv for all compounds.

14.4 SAMPLING AND ANALYSIS PRECISION FROM DUPLICATE SAMPLES

Sampling and analysis precision was measured by analyzing duplicate samples taken simultaneously at each UATMP site. The absolute percent difference for all duplicate samples averaged 20.52%, which is larger than the replicate analysis precision (~19.80 percent). This is expected because the statistics for duplicate samples include sampling and analysis error, whereas the replicate precision includes only analytical error. Duplicate sample statistics for the 1988 UATMP are summarized in Table 14-7.

Table 14-8 shows the duplicate sample precision statistics by compound. Figure 14-2 plots the duplicate sample imprecision as a function of the average of the duplicate pair concentration. The same general trends appear among the results shown in Table 14-8 and Figure 14-2 as were seen for the replicate analyses. Below 5 ppbv the variability for the duplicate samples increases significantly.

14.5 EXTERNAL AUDIT RESULTS

The results are summarized in Tables 14-9 through 14-14 for external audits 5 through 7. Audit samples were analyzed both by GC/MD and GC/MS.

TABLE 14-5. 1988 UATMP CUMULATIVE REPLICATE STATISTICS

	Mean			STD	% CV			Absolute % Difference		
	Min ppbv	Max ppbv	Average ppbv	Average ppbv	Min	Max	Average	Min	Max	Average
Third Quarter 1987	0.24	38.18	3.49	0.33	0.00	116.20	13.77	0.00	164.33	19.47
First Quarter 1988	0.05	6.73	0.91	0.08	0.00	109.20	15.81	0.00	154.43	22.37
Second Quarter 1988	0.07	14.54	2.15	0.40	0.00	115.49	19.20	0.00	163.33	27.26
Third Quarter 1988	0.04	28.14	2.22	0.11	0.00	92.81	9.25	0.00	131.25	13.08
Cumulative	0.04	38.18	2.21	0.23	0.00	116.20	14.00	0.00	164.33	19.80

TABLE 14-6. 1988 UATMP REPLICATE STATISTICS BY COMPOUND

Compound	Replicate Pairs	Mean ppbv	Average Standard Deviation ppbv	%CV Mean	Absolute % Difference		
					Min	Max	Mean
Propylene	3	3.65	0.16	4.10	0.60	11.27	5.79
1,3-Butadiene	7	0.37	0.06	13.85	6.90	33.33	19.59
Chloromethane	1	3.93	0.23	5.76	8.14	8.14	8.14
Methylene chloride	7	4.26	0.61	17.00	1.01	85.47	16.25
trans-1,2-Dichloroethylene	3	1.56	0.11	6.74	0.00	14.81	9.54
1,1-Dichloroethane	1	0.19	0.16	81.88	115.79	115.79	115.79
Chloroprene	6	1.01	0.12	31.12	1.42	131.25	44.01
Chloroform	2	19.59	0.14	2.32	0.89	5.67	3.28
1,1,1-Trichloroethane	44	0.97	0.07	9.96	0.18	163.33	14.08
1,2-Dichloroethane	31	1.62	0.41	25.63	0.00	127.02	36.24
Benzene/1,2-dichloroethane	31	2.71	0.40	15.26	0.00	87.31	21.58
Benzene	56	1.56	0.09	8.45	0.00	154.43	11.95
Trichloroethylene	8	1.31	0.08	9.06	0.32	45.48	12.82
1,2-Dichloropropane	2	0.29	0.23	82.92	109.52	125.00	117.26
trans-1,3-Dichloropropylene	2	1.89	0.11	4.60	3.77	9.23	6.50
Toluene	76	3.13	0.28	10.37	0.00	84.28	14.67
n-Octane	15	0.76	0.18	20.35	0.00	80.00	28.77
n-Octane/trans-1,3-Dichloropropylene	4	2.98	0.65	16.24	15.27	37.94	22.97
cis-1,3-Dichloropropylene	1	1.35	0.21	15.71	22.22	22.22	22.22
1,1,2-Trichloroethane	1	0.35	0.00	0.00	0.00	0.00	0.00
Tetrachloroethylene	12	0.80	0.19	25.58	3.51	77.78	36.17
Chlorobenzene	21	0.85	0.10	14.36	0.00	66.67	20.31
Ethylbenzene	32	0.72	0.09	10.31	0.00	76.28	14.57
m/p-Xylene	75	4.02	0.35	10.40	0.00	164.33	14.70
Styrene/o-xylene	59	1.11	0.15	16.13	0.00	109.24	22.81
1,1,2,2-Tetrachloroethane	2	0.33	0.15	49.61	61.94	78.39	70.16
m-Dichlorobenzene	6	0.56	0.13	34.74	5.61	133.33	49.12
p-Dichlorobenzene	14	6.53	0.47	14.74	0.00	106.25	20.85
o-Dichlorobenzene	4	0.72	0.09	14.90	6.61	42.42	21.07

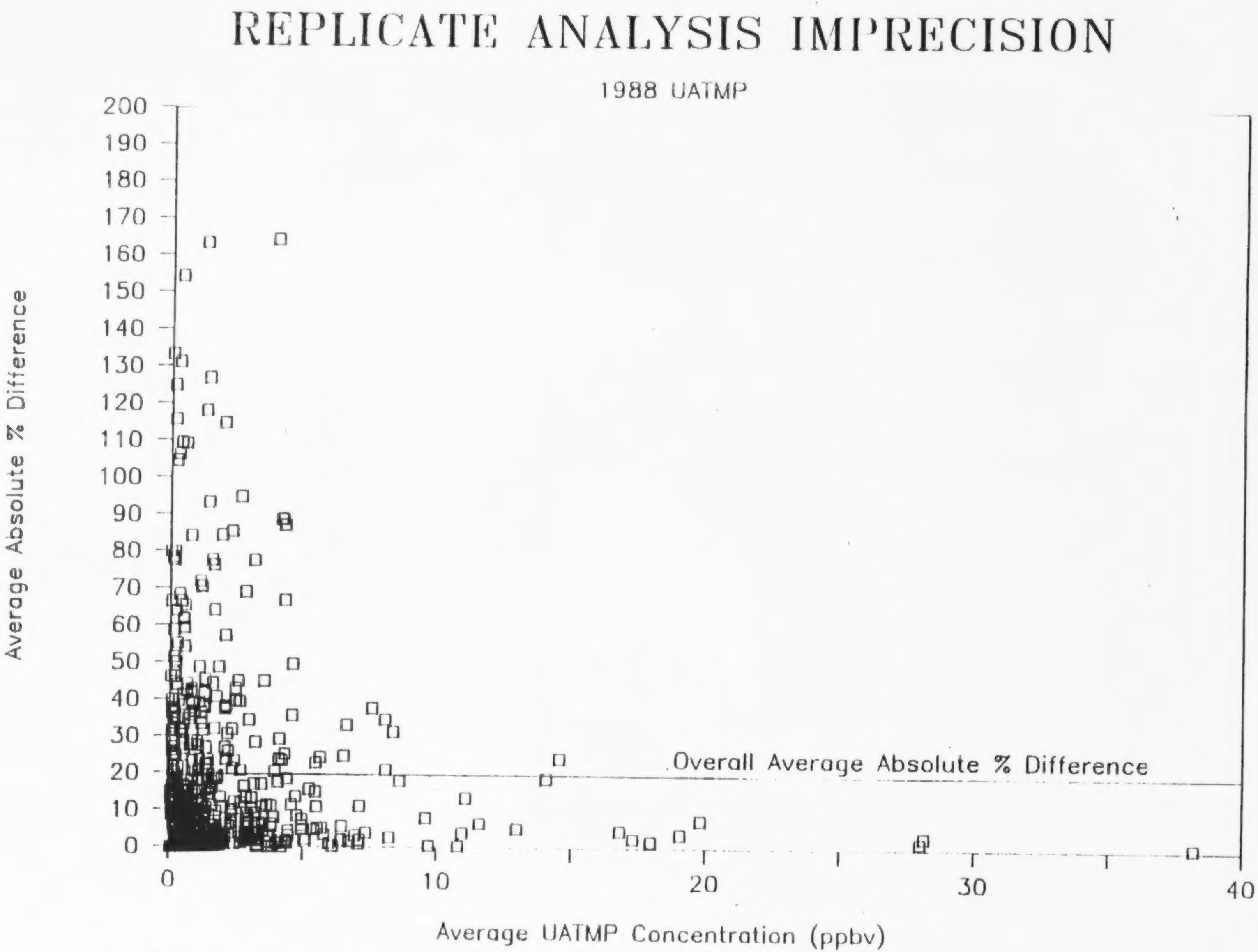

Figure 14–1. Replicate UATMP analysis results comparing average concentration with average absolute percent difference.

TABLE 14-7. 1988 UATMP CUMULATIVE DUPLICATE STATISTICS

	Mean			STD	% CV			Absolute % Difference		
	Min	Max	Average	Average	Min	Max	Average	Min	Max	Average
Third Quarter 1987	0.22	21.88	3.85	0.33	0.25	60.85	12.50	0.36	86.05	17.68
First Quarter 1988	0.04	8.49	1.01	0.13	0.00	105.75	16.42	0.00	149.55	23.27
Second Quarter 1988	0.03	17.12	2.07	0.39	0.00	121.31	17.62	0.00	171.56	24.91
Third Quarter 1988	0.05	227.48	3.17	0.98	0.00	130.88	12.30	0.00	185.09	17.40
Cumulative	0.03	227.48	2.55	0.60	0.00	130.88	14.51	0.00	185.09	20.52

Note: Duplicate samples BRVT 379D and BRVT 380D were omitted from the second quarter and cumulative duplicate statistics due to a difference in canister pressure upon receipt.

TABLE 14-8. 1988 UATMP DUPLICATE STATISTICS BY COMPOUND

Compound	Duplicate Pairs	Mean ppbv	Average Standard Deviation ppbv	%CV Mean	Absolute % Difference		
					Min	Max	Mean
Acetylene	1	21.63	3.13	14.48	20.48	20.48	20.48
Propylene	6	3.94	0.47	9.94	2.77	36.94	14.06
1,3-Butadiene	10	0.73	0.16	20.51	4.55	94.82	29.01
Chloromethane	1	21.67	1.24	5.71	8.08	8.08	8.08
Chloroethane	4	0.68	0.18	34.79	15.38	88.89	49.20
Methylene chloride	7	4.60	0.49	12.86	2.46	39.51	18.19
trans-1,2-Dichloroethylene	4	0.99	0.13	27.12	9.84	52.87	38.35
1,1-Dichloroethane	1	0.07	0.03	40.41	57.14	57.14	57.14
Chloroprene	4	0.35	0.20	55.65	27.27	147.54	78.70
Bromochloromethane	1	0.04	0.01	34.14	48.28	48.28	48.28
Chloroform	4	1.68	0.25	14.73	8.04	50.49	20.84
1,1,1-Trichloroethane	44	1.06	0.09	10.33	0.20	77.08	14.61
Carbon tetrachloride	1	0.35	0.00	0.00	0.00	0.00	0.00
1,2-Dichloroethane	31	1.98	0.24	11.30	0.00	55.09	15.98
Benzene/1,2-dichloroethane	30	3.50	0.35	10.11	0.95	45.35	14.30
Benzene	55	1.48	0.09	8.20	0.00	79.07	11.60
Trichloroethylene	4	1.48	0.10	13.13	1.23	50.64	18.57
1,2-Dichloropropane	2	3.17	0.13	3.40	2.82	6.79	4.80
trans-1,3-Dichloropropylene	1	0.36	0.22	60.06	84.93	84.93	84.93
Toluene	73	5.73	2.29	11.55	0.00	102.88	16.33
n-Octane	7	0.42	0.12	24.35	14.63	59.02	34.44
n-Octane/trans-1,3-dichloropropylene	1	1.99	0.40	20.20	28.57	28.57	28.57
1,1,2-Trichloroethane	4	0.59	0.40	56.16	5.00	185.09	79.42
Tetrachloroethylene	5	13.66	7.89	22.86	3.51	84.21	32.32
Chlorobenzene	14	0.72	0.05	10.78	0.00	84.44	15.25
Ethylbenzene	32	0.65	0.05	7.88	0.00	52.63	11.14
m/p-Xylene	68	3.06	0.40	15.01	0.00	171.56	21.23
Styrene/o-xylene	57	0.81	0.08	14.20	0.00	83.33	20.08
1,1,2,2-Tetrachloroethane	2	0.88	0.08	34.80	0.52	97.91	49.22
m-Dichlorobenzene	6	0.45	0.14	41.64	10.31	117.95	58.89
p-Dichlorobenzene	14	3.40	0.41	31.05	1.34	120.00	43.91
o-Dichlorobenzene	4	2.17	0.70	52.51	23.00	117.24	74.26

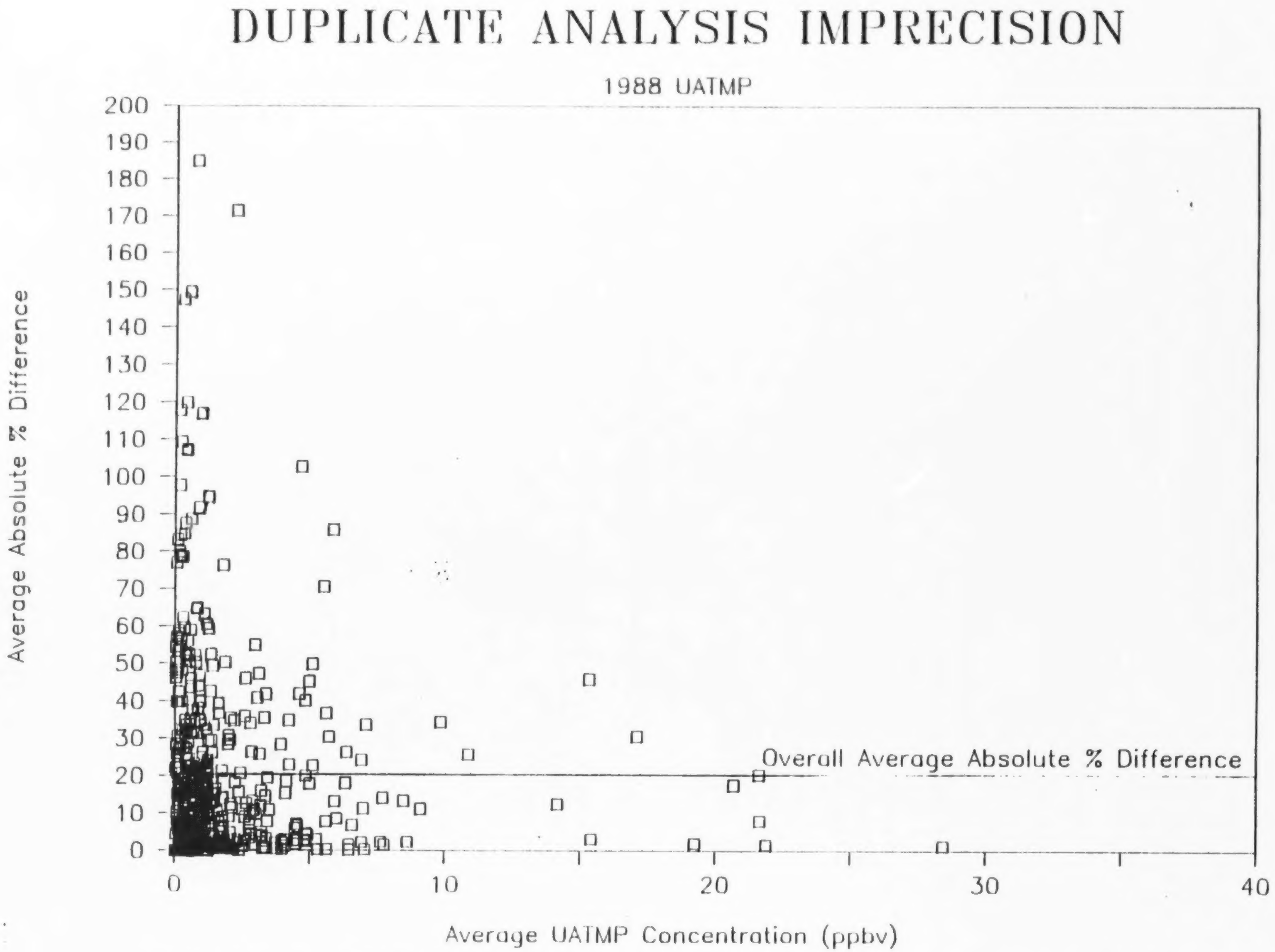

Figure 14–2. Duplicate UATMP analysis results comparing average concentration with average absolute percent difference.

TABLE 14-9. 1988 UATMP GC/MD AUDIT NO. 5 RESULTS

Compound	Concentration Reported By Radian ppbv	Reference Concentration ppbv	Percent Bias[a]
Vinyl chloride	4.9	4.4	11.4
Chloroform	5.3	4.8	10.4
Carbon tetrachloride	4.6	4.6	0.0
Methylene chloride	5.0	4.6	8.7
1,2-Dichloroethane	5.1	4.9	4.1
Trichloroethylene	5.3	5.6	-5.4
Benzene	4.3	4.3	0.0
Bromomethane	5.2	4.8	8.3
1,1,1-Trichloroethane	5.1	4.7	8.5
1,2-Dichloropropane	4.9	5.0	-2.0
Toluene	4.5	4.8	-6.2
Chlorobenzene	4.4	5.0	-12.0
Ethylbenzene	4.2	4.7	-10.6
o-Xylene	4.2	4.9	-14.3

[a] Percent bias = (Radian Concentration - Reference Concentration) / (Reference Concentration) x 100.

TABLE 14-10. 1988 UATMP GC/MS AUDIT NO. 5 RESULTS

Compound	Concentration Reported By Radian ppbv	Reference Concentration ppbv	Percent Bias[a]
Vinyl chloride	5.7	4.4	29.5
Chloroform	4.8	4.8	0.0
Carbon tetrachloride	4.2	4.6	-8.7
Methylene chloride	4.9	4.6	6.5
1,2-Dichloroethane	4.7	4.9	-4.1
Trichloroethylene	5.2	5.6	-7.1
Benzene	4.3	4.3	0.0
Bromomethane	5.2	4.8	8.3
1,1,1-Trichloroethane	4.1	4.7	-12.8
1,2-Dichloropropane	4.6	5.0	-8.0
Toluene	4.8	4.8	0.0
Chlorobenzene	4.2	5.0	-16.0
Ethylbenzene	4.0	4.7	-14.9
o-Xylene	6.1	4.9	24.5

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[a] Percent bias = (Radian Concentration - Reference Concentration) / (Reference Concentration) x 100.

TABLE 14-10. 1988 UATMP GC/MS AUDIT NO. 5 RESULTS

Compound	Concentration Reported By Radian ppbv	Reference Concentration ppbv	Percent Bias[a]
Vinyl chloride	5.7	4.4	29.5
Chloroform	4.8	4.8	0.0
Carbon tetrachloride	4.2	4.6	-8.7
Methylene chloride	4.9	4.6	6.5
1,2-Dichloroethane	4.7	4.9	-4.1
Trichloroethylene	5.2	5.6	-7.1
Benzene	4.3	4.3	0.0
Bromomethane	5.2	4.8	8.3
1,1,1-Trichloroethane	4.1	4.7	-12.8
1,2-Dichloropropane	4.6	5.0	-8.0
Toluene	4.8	4.8	0.0
Chlorobenzene	4.2	5.0	-16.0
Ethylbenzene	4.0	4.7	-14.9
o-Xylene	6.1	4.9	24.5

[a] Percent bias = (Radian Concentration - Reference Concentration) / (Reference Concentration) x 100.

TABLE 14-11. 1988 UATMP GC/MD AUDIT NO. 6 RESULTS

Compound	Concentration Reported By Radian ppbv	Reference Concentration ppbv	Percent Bias[a]
Vinyl chloride	2.3	2.2	4.5
Chloroform	2.8	2.4	17.0
Carbon tetrachloride	2.6	2.3	13.0
Methylene chloride	2.8	2.3	22.0
1,2-Dichloroethane	2.6	2.5	4.0
Trichloroethylene	3.0	2.8	7.1
Benzene	2.2	2.2	0.0
Tetrachloroethylene	2.9	2.5	16.0
1,3-Butadiene	2.1	c	--
Bromomethane	2.9	2.4	21.0
Trichlorofluoromethane	b	2.5	--
1,1,1-Trichloroethane	2.7	2.4	12.0
1,2-Dichloropropane	2.5	2.5	0.0
1,2-Dibromoethane	b	2.6	--
Toluene	2.8	2.4	17.0
Chlorobenzene	2.9	2.5	16.0
Ethylbenzene	2.0	2.4	-38.0
o-Xylene	2.4	2.5	-8.0

[a] Percent bias = (Radian Concentration - Reference Concentration) / (Reference Concentration) x 100.

[b] Not target compound.

[c] Present but not quantified.

TABLE 14-12. 1988 UATMP GC/MS AUDIT NO. 6 RESULTS

Compound	Concentration Reported By Radian ppbv	Reference Concentration ppbv	Percent Bias[a]
Vinyl chloride	2.4	2.2	9.1
Chloroform	2.5	2.4	4.2
Carbon tetrachloride	2.4	2.3	4.4
Methylene chloride	3.9	2.3	69.6
1,2-Dichloroethane	2.1	2.5	-16.0
Trichloroethylene	2.7	2.8	-3.6
Benzene	2.6	2.2	18.2
Tetrachloroethylene	2.3	2.5	-8.0
1,3-Butadiene	2.7	c	--
Bromomethane	2.4	2.4	0.0
Trichlorofluoromethane	b	2.5	--
1,1,1-Trichloroethane	2.5	2.4	4.2
1,2-Dichloropropane	2.7	2.5	8.0
1,2-Dibromoethane	b	2.6	--
Toluene	2.7	2.4	12.5
Chlorobenzene	2.7	2.5	8.0
Ethylbenzene	2.0	2.4	-16.7
o-Xylene	2.7	2.5	8.0

[a] Percent bias = (Radian Concentration - Reference Concentration) / (Reference Concentration) x 100.

[b] Not target compound.

[c] Present but not quantified.

TABLE 14-13. 1988 UATMP GC/MD AUDIT NO. 7 RESULTS

Compound	Concentration Reported By Radian ppbv	Reference Concentration ppbv	Percent Bias[a]
Vinyl chloride	3.3	3.3	0.0
Chloroform	3.6	3.6	0.0
Carbon tetrachloride	3.7	3.4	8.8
Methylene chloride	3.9	3.4	15.0
1,2-Dichloroethane	3.8	3.6	5.6
Trichloroethylene	4.1	4.1	0.0
Benzene	3.2	3.2	0.0
Tetrachloroethylene	3.9	3.7	5.4
1,3-Butadiene	3.1	c	--
Bromomethane	3.6	3.6	0.0
Trichlorofluoromethane	b	3.7	--
1,1,1-Trichloroethane	3.8	3.5	8.6
1,2-Dichloropropane	3.9	3.7	5.4
1,2-Dibromoethane	b	3.8	--
Toluene	3.9	3.6	8.3
Chlorobenzene	4.2	3.7	14.0
Ethylbenzene	3.4	3.5	-2.9
o-Xylene	3.8	3.6	5.6

[a] Percent bias = (Radian Concentration - Reference Concentration) / (Reference Concentration) x 100.

[b] Not target compound.

[c] Present but not quantified.

TABLE 14-14. 1988 UATMP GC/MS AUDIT NO. 7 RESULTS

Compound	Concentration Reported By Radian ppbv	Reference Concentration ppbv	Percent Bias[a]
Vinyl chloride	3.8	3.3	15.0
Chloroform	3.9	3.6	8.3
Carbon tetrachloride	3.9	3.4	15.0
Methylene chloride	4.0	3.4	18.0
1,2-Dichloroethane	4.1	3.6	14.0
Trichloroethylene	4.3	4.1	4.9
Benzene	3.6	3.2	12.0
Tetrachloroethylene	4.1	3.7	11.0
1,3-Butadiene	3.8	c	--
Bromomethane	4.0	3.6	11.0
Trichlorofluoromethane	b	3.7	--
1,1,1-Trichloroethane	4.1	3.5	17.0
1,2-Dichloropropane	3.6	3.7	-2.7
1,2-Dibromoethane	b	3.8	--
Toluene	4.5	3.6	25.0
Chlorobenzene	4.1	3.7	11.0
Ethylbenzene	3.3	3.5	-5.7
o-Xylene	4.7	3.6	31.0

[a] Percent bias = (Radian Concentration - Reference Concentration) / (Reference Concentration) x 100.

[b] Not target compound.

[c] Present but not quantified.

The audits began in March 1988 and were supplied by the U.S. EPA, EMSL, QAD. During the period from Audit No. 1 through Audit No. 4, accuracy, or percent bias, was frequently greater than 30 percent. The inaccuracy was identified as a problem with the in-house working standard preparation. All GC/MD data obtained during this period were corrected for the inaccuracy by using correction factors based on the agreement between certified gas standards prepared by dynamic flow dilution and the response factors used during the time period in which Audits 1 through 4 were analyzed.

Beginning with Audit No. 5, Radian used a flow dilution apparatus and certified gas standards to generate in-house standards. This procedure of standards generation greatly improved the accuracy in audit results, and brought the percent bias well within the ±30% range.

14.6 GC/MD COMPOUND IDENTIFICATION CONFIRMATION

GC/MD compound identifications were confirmed using GC/MS. A contributing factor that possibly decreased the percent confirmation was the mode in which the GC/MS was operated. In the first quarter the GC/MS was operated in the full scan mode and subsequently in the MID mode for the UATMP target compounds. Another factor was that there were frequent lapses of several days between the GC/MD analyses and the GC/MS analyses of the same ambient air sample. This time period may be significant because adsorption equilibria may cause a compound which was not identified by GC/MD analysis, to be identified by GC/MS or vice versa. This adsorption equilibrium phenomenon is particularly critical if the compound is identified near the estimated detection limit of either GC/MD or GC/MS. A third factor influencing confirmation was the discovery of an interfering compound (acetonitrile) used in the aldehyde collection portion of the UATMP sampler. The presence of this compound obscured the GC/MD results for methylene chloride in some samples. The GC/MS analysis was not affected, thus allowing GC/MS to identify compounds that were not identified by GC/MD.

Subsequent to the discovery of the contaminating acetonitrile from the aldehyde cartridges, separate sampling lines were installed for the aldehyde cartridges and the UATMP canister samples. Thereafter, the acetonitrile interference with the UATMP samples was eliminated. The results are summarized in Table 14-15 and show an overall confirmed identification rate of 86.7 percent. A "confirmed" identification included those compounds that either were identified or were not identified by both GC/MD and GC/MS.

The MID mode was used to enhance sensitivity for target compounds. Full scan was used only when the GC/MD chromatograms indicated a need to identify unknown compounds.

14.7 COMPLETENESS

Completeness was measured in terms of the percentage of the scheduled samples that resulted in a valid sample analysis by GC/MD. Table 14-16 shows the completeness quality statistics. Completeness ranged from 88.2% at C4IL/C5IL to 100% at 7 (of the 19) UATMP sites. This is an excellent record, considering the complexity of the sampling apparatus and the fact that this was the first year of the UATMP. Table 14-17 lists the voided samples.

14.8 CANISTER CLEANUP QUALITY AND COMPOUND CARRYOVER

Compound carryover in canisters was estimated by analyzing the canisters using GC/MD immediately after the cleanup procedure and again after approximately 16 hours of equilibration. The canisters were cleaned using the procedure described in Section 3.3, Volume I of the report,[9] with the exception of pulling the final 5 mm Hg vacuum on the canisters. The pressurized humid air canisters were bled to ambient pressure prior to GC/MD analysis. The total organic compound concentration was estimated for both analyses by using the calculated ppbv for all peaks in the chromatogram. Target compounds that were identified were noted.

Table 14-18 estimates the compound carryover in canisters based on the initial analysis of cleaned, dried air that had been humidified in the canister and again about 16 hours later. The table shows the distribution of the compounds identified along with the tally. The discrepancy in the tally for both columns indicates that the compound was not identifed at a concentration above the estimated method detection limit in one or both of the analyses. The average concentration of UATMP target compounds identified in the first sample analyses was 0.12 ppbv. For the second analyses, the average compound concentration was 0.16 ppbv.

TABLE 14-15. 1988 UATMP COMPOUND IDENTIFICATION CONFIRMATION

GC/MD vs GC/MS Comparison	Cases	Percentage
Positive GC/MD - Positive GC/MS	551	15.34
Positive GC/MD - Negative GC/MS	306	8.52
Negative GC/MD - Positive GC/MS	170	4.73
Negative GC/MD - Negative GC/MS	2564	71.40
Total	3591	99.99

Total compound identification confirmation = 15.34% + 71.40% = 86.74%

TABLE 14-16. 1988 UATMP COMPLETENESS

Site Code	No. Sampling Events	Duplicate Pairs	Total Scheduled Samples	Valid Samples	Percent Completeness
ATGA	31	5	36	36	100.0
BHAL	31	4	35	35	100.0
BRLA	31	5	36	35	97.2
BRVT	31	5	36	36	100.0
C4IL/C5IL	31	3	34	30	88.2
CLOH	31	4	35	33	94.3
DBMI	28	6	34	34	100.0
DLTX	31	3	34	34	100.0
DTMI	29	4	33	30	90.0
H1TX	32	4	36	35	97.2
HAIN	32	5	37	36	97.3
JAFL	31	4	35	34	97.1
L2KY	30	4	34	33	97.1
LAMI	30	2	32	32	100.0
MDMI	30	6	36	35	97.2
MIFL	30	3	33	32	97.0
P2OR	32	5	37	36	97.3
PHMI	28	3	31	30	96.8
SAIL	31	3	34	34	100.0
				Average	97.3%

TABLE 14-17. 1988 UATMP VOIDED SAMPLES

Site Code	UATMP ID	Reason For Voided Sample
BRLA	0404	Canister pressure 0.0 in. Hg
C4IL	0110	Failed to open valve for sample
C4IL	0111	Failed to open valve for sample
C4IL	0311	Received at 27.0 in. Hg vacuum
C5IL	0576	Failed to open valve for sample
CLOH	0542D	Received at 17.0 in. Hg vacuum
	0543D	Received at 17.0 in. Hg vacuum
DTMI	0083	Canister leaked
DTMI	0113	Failed to open valve for sample
DTMI	0632	Canister valve cross threaded on receipt
HAIN	0595	Canister leaked
JAFL	0630	Canister leaked
L2KY	0112	Failed to open valve for sample
MDMI	0566	Received at 20.99 in. Hg vacuum
MIFL	0420	Canister valve left open after receipt
P2OR	0109	Time elapsed was reset
PHMI	0142	Improper sample injection

TABLE 14-18. 1988 UATMP ESTIMATED COMPOUND CARRYOVER IN CANISTERS

Compound	No. of Cases[a] of Compound Identified 1st Analysis	2nd Analysis
Vinyl chloride	0	1
Chloromethane	3	3
Chloroethane	4	6
Methylene chloride	1	1
trans-1,2-Dichloroethylene	1	1
1,1-Dichloroethane	0	1
Chloroprene	1	1
1,2-Dichloroethane	4	4
Benzene	9	8
1,2-Dichloropropane	4	4
trans-1,3-Dichloropropylene	3	1
Toluene	10	16
n-Octane	6	6
1,1,2-Trichloroethane	3	2
Chlorobenzene	5	6
Ethylbenzene	5	5
m/p-Xylene	6	2
Styrene/o-xylene	5	5

[a] Nineteen canisters were sampled twice and the samples analyzed by GC/MD.

The increase in average target compound concentration is about 30 percent. The total or cumulative concentration for all compounds detected in the first analyses was 25.6 ppbv. The total or cumulative concentration for all compounds detected in the second analyses was 30.5 ppbv. The average increase in the total organic compound concentration after the 16 hours equilibration was 23.6 percent.

Figure 14-3 plots the concentration ratio data for each canister versus the NMOC concentration prior to cleanup. There are insufficient data in the graph to note any trends at this time. These studies show that there is a measurable amount of UATMP target compounds remaining in the canister after cleanup. The data suggest that there is an equilibration period which may result from adsorption equilibrium phenomena between compounds in the gas phase and the interior surfaces of the canister walls. The paucity of the data does not allow firm conclusions, but shows the need for further study to determine the magnitude of the change and the equilibration time necessary to generate more precise data.

14.9 CANISTER PRESSURE RESULTS

The canister pressure was measured immediately prior to withdrawing a sample from the canister for analysis using a precision absolute pressure gauge.

Absolute canister pressures, including pressures for duplicate canisters and canisters for which replicate analyses were performed, are plotted in Figure 14-4. The figure is a stem-and-leaf plot showing all the data and indicates a frequency distribution. The pressure has been corrected to standard conditions of zero degrees centigrade ($0.0^{o}C$). Pressure ranged from 286.3 mm Hg at the top of the stem-and-leaf plot, to 745.7 mm Hg at the bottom of the plot, and averaged 636.1 mm Hg. Other statistics are shown on the figure. The distribution appears to be binodal, having a peak around 399 mm Hg, and again around 711 mm Hg.

The pressure distribution data indicate a wide range of absolute pressure collected by the UATMP 24-hour samplers -- 301.9 mm Hg (~18.0 in. Hg vacuum) to 740.6 mm Hg (~0.76 in. Hg vacuum). The results show that the site operators were not able to maintain a target value of 1.0 to 3.0 in. Hg vacuum as the final sampling pressure.

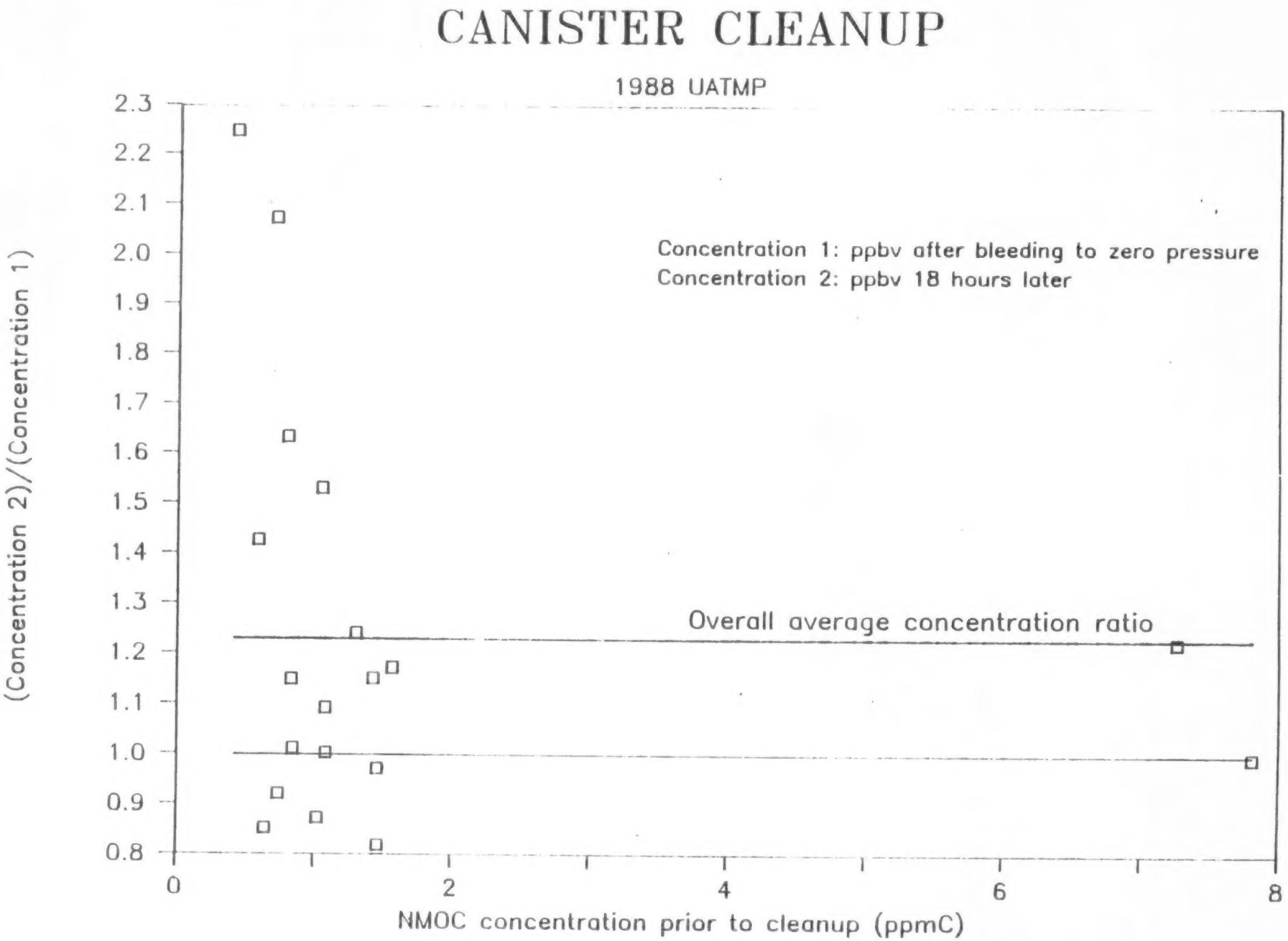

Figure 14–3. Canister carryover estimate.

```
2      889
3      02333 34445 67778 99
4      00022 223
4      4
4      6667
4      88899
5      00000 11111
5      22222 33333 33
5      44444 44444 55555 55555 5
5      66666 66666 67777 77777 77777 77777
5   H  88888 88888 88888 88899 99999 99999 99999 99999
6      00000 00000 00000 00000 00000 11111 11111 11111 11111 1
6      22222 22222 22222 22222 23333 33333 33333
6   M  44444 44444 44444 44444 44444 55555 55555 55555 55555 5555
6      66666 66666 66666 66666 66777 77777 77777 77777 77777 7
6      88888 88888 88888 88888 88888 88888 88899 99999 99999 99999 99999 99999
7   H  00000 00000 00000 00000 00000 00000 00000 00000 00011 11111 11111 11111 11111 11111 11111 11111 11111 111
7      22222 22222 22222 22222 22222 22222 22222 22222 22222 22222 23333 33333 33333 33333 3
7      444
```

	Absolute Pressure,[a] mm Hg
Cases	549
Minimum	286.3
Maximum	745.7
Mean	636.1
Standard Deviation	89.7
Standard Error	3.8
Skewness	-1.5
Kurtosis	2.6
Lower Hinge (H)	595.2
Median (M)	656.9
Upper Hinge (H)	704.4

[a] Pressure corrected to 0.0 degrees centigrade

Figure 14-4. UATMP canister absolute pressure distribution, including duplicate sample data.

1592410R

The canister absolute pressure data, excluding duplicate samples, are plotted in Figure 14-5 and show a pressure range from 301.9 to 740.6 mm Hg. The binodal nature of the frequency distribution is not as pronounced as in Figure 14-4, but it still remains. This comparison shows that, although the duplicate samples are significantly responsible for the binodal frequency distribution, other unknown factors also contribute to this phenomenon. That is, elimination of the duplicate sample measurements does not eliminate the node around 390 mm Hg. The reason for the binodal pressure distribution is not known.

Table 14-19 gives, by site, the average canister pressures at the time of the GC/MD analyses. The average pressures range from 1.42 in. Hg vacuum (about 728.5 mm Hg absolute) from the Houston, Texas site to 9.18 in. Hg vacuum (about 526.8 mm Hg absolute) for the Jacksonville, Florida site. The standard deviations range from 0.89 in. Hg vacuum at the Houston, Texas site to 5.9 in. Hg vacuum for the Jacksonville, Florida site. It is clear that the average sample pressures differ significantly from site to site, as do the standard deviations. The differences are probably caused by a combination of site operator differences from one site to another, and the sampler differences from site to site. It is important to monitor the canister pressures to ensure collection of a UATMP sample that is valid. It is necessary for the sample to have some vacuum remaining in the canister, at least 0.5 in. Hg vacuum, to be sure that a 24-hour integrated sample was obtained. If the vacuum is less than 0.5 in. Hg vacuum, at least part of the sample was obtained at a slower rate than the first part of the sample; therefore, the whole sample is not truly representative of a 24-hour integrated sample. If the vacuum in the canister is much lower than about 10 in. Hg vacuum it requires a longer time for the sample interface to load a sample from the canister for analysis and the imprecision of the sample volume increases.

14.10 DATA VALIDATION

A Nelson Chromatography Data System was used to acquire UATMP chromatography data. Responses from each detector are received by two Nelson A/D interfaces which transfer the data to a microcomputer. The Nelson raw data files and area table files for each sample are stored directly to a

```
3        03458 77789
4        0
4        22223
4        4
4        666
4        88899
5        00000 11111
5        22222 33333 33
5        44444 44444 55555 5555
5        66666 66666 67777 77777 77777 7
5    H   88888 88888 88888 88999 99999 99999 9
6        00000 00000 00000 00011 11111 11111 11111 1
6        22222 22222 22222 22233 33333 3333
6    M   44444 44444 44444 44555 55556 55555 55555 55
6        66666 66666 66666 67777 77777 7777
6        88888 88888 88888 88888 88888 89999 99999 99999 99999
7    H   00000 00000 00000 00000 00000 00000 00011 11111 11111 11111 11111 11111 11111 11111 1
7        22222 22222 22222 22222 22222 22222 22222 22222 23333 33333 33333 33
7        4
```

	Absolute Pressure,[a] mm Hg
Cases	428
Minimum	301.9
Maximum	740.6
Mean	637.3
Standard Deviation	83.3
Standard Error	4.0
Skewness	-1.2
Kurtosis	1.6
Lower Hinge (H)	589.6
Median (M)	655.0
Upper Hinge (H)	706.2

[a] Pressure corrected to 0.0 degrees centigrade

Figure 14-5. UATMP canister absolute pressure distribution, excluding duplicate sample data.

1592408R

TABLE 14-19. 1988 UATMP ANALYSIS PRESSURES OF SAMPLES BY SITE

Site Code	Cases	Mean in. Hg Vacuum	Standard Deviation in. Hg Vacuum
ATGA	32	4.79	2.4
BRLA	35	4.34	5.7
BHAL	32	3.00	3.1
BRVT	34	3.97	3.7
C4IL/C5IL[a]	18	3.42	3.6
CLOH	32	3.30	4.1
DLTX	31	2.57	4.1
DBMI	31	5.45	2.4
DTMI	28	5.34	3.1
HAIN	34	5.36	3.1
H1TX	31	1.42	0.89
JAFL	33	9.18	5.9
LAMI	28	3.83	2.7
LIKY	30	2.65	1.9
MIFL	31	2.23	2.4
MDMI	31	6.55	3.5
PHMI	31	4.67	3.3
P2OR	31	5.21	5.4
SAIL	31	6.10	3.7

[a] From October 1987 through April 3, 1988 the site was located at Carver High School and known as C4IL. From June 25, 1988 through September 18, 1988, the site was located at Washington High School and was known as C5IL.

20-megabyte (mb) removable cartridge Bernoulli disk. These data are backed up with additional 20-mb Bernoulli cartridges and subsequently on magnetic tape for permanent storage. The area table files are processed by a peak identification program written in "C" language. The peak identification program uses PID/FID and ECD/FID ratios, average response factors, and retention time windows to identify target compounds. This program compares the sample ratios for each compound to those of an average calculated calibration standard. The percent coefficient of variation is calculated between the sample compound ratio and that of an average standard and is used as a criterion for identification. The peak identification program also uses the average retention time for toluene as a reference with which to compare retention times for compounds in the sample. Compounds responding on only one detector must be identified by retention time and the absence of response on the other two detectors. When a compound identification is made by the program, it calculates the concentration in ppbv based on an average standard response factor for the corresponding compound for each detector. Each sample chromatogram is reviewed, using the Nelson data system, and compared to the peak identification. The verified data are then entered into a cumulative database using Paradox® software and also into data summaries using Lotus® 1-2-3 software. The database and data summaries are finally checked for data entry accuracy and completeness before statistical calculations are performed.

14.11 DATA RECORDS

The data records for UATMP include field sampling information, laboratory receipt and analysis information, and processed data obtained for 38 target compounds for 719 GC/MD analyses and 118 GC/MS analyses of UATMP samples, plus daily checks, audits, and other QA/QC samples.

The field data sheets that accompany each canister to the sampling sites are completed by the site operators and laboratory personnel upon receipt. These data sheets are bound and kept in the laboratory and pertinent field data are recorded on magnetic disks. Each sample is assigned a unique identification number upon receipt in the laboratory. This identification number appears on the field data sheet, chromatogram, Nelson chromatography data files, in the cumulative database and data summary. Nelson chromatography data for each UATMP sample are stored directly to a 20-mb removable cartridge disk. These primary data disks are backed up daily to 20-mb removable cartridge disks and are finally archived to 20-megabyte tapes. The hard copy chromatograms are stored in file folders by date.

A daily analysis log is kept as a means of tracking date and conditions of analysis. The analyst also records information in a laboratory notebook as needed. Following the identification process and data verification, the results for each sample are entered in a cumulative database using Paradox® database software. For reporting purposes these data are also entered in a LOTUS® 1-2-3 spreadsheet data summary.

15. RECOMMENDATIONS

The following recommendations derive from experience with the 1988 UATMP. During this program a significant amount of method qualification and modification was necessary. Much progress was made and the data obtained reflect the very best canister technology that is available today. Additional development is needed to better define precision and accuracy, especially at levels near the estimated MDLs for the target compounds.

15.1 CANISTER CLEANUP AND STABILITY STUDIES

Although preliminary studies indicated that the average concentration of target compounds carried over in canisters was < 0.2 ppbv, canister cleanup studies are important to relate the amount of compound carryover in canisters one may expect to observe from one sample to another. Canister cleanup studies can also be used to evaluate canister cleaning strategies for the UATMP. Canister stability studies aid in the determination of how representative the canister sample is of the orginal ambient air that has been sampled. It is recommended a canister cleaning study and canister stability study be performed to evaluate these important issues.

15.2 UATMP FIELD AUDIT

It is recommended that a field audit procedure for UATMP samplers be developed and implemented for the target compounds. The need for the field audit procedure relates to canister cleanliness and to the reaction and adsorption equilibria which occur in a canister after an ambient air sample is taken. A proper field audit is the only approach which will test the entire UATMP method accuracy.

One benefit of the field audit procedure would be determining the magnitude of chemical reaction and adsorption that occurs when an ambient air sample is collected in a clean canister. Another benefit would be determining if a difference in concentration can be detected between a heated stainless steel sampler probe compared to an unheated probe.

Once the UATMP field audit procedure is developed, semiannual field audits are recommended. It is also recommended that bimonthly external analytical audits at two different concentration levels be continued in the 1989 UATMP.

15.3 METHOD DETECTION LIMIT STUDY

It is recommended that further MDL studies be conducted for the UATMP target compounds using both the GC/MD and the GC/MS analytical methods. During the course of the 1988 UATMP, estimated MDLs were determined for the GC/MD and GC/MS in the MID mode.

The method outlined in the Federal Register[10] is recommended for both the GC/MD and the GC/MS (in the MID mode) for the 38 UATMP target compounds.

The results should also be processed using specified assurance probabilities recommended in Reference 11. The assurance probabilities recommended in Reference 11 specify probabilities of Type I and Type II errors. Type I errors relate to reporting an analyte as present when it is not, and Type II errors relate to reporting an analyte as absent when it is present. The Federal Register MDL[10] method sets a 95% probability against a Type I error, but results in a 50% probability of a Type II error.

Reference 11 permits setting 95% (or any other percent) probabilities for both type errors, and although it results in a higher MDL, it also gives a more realistic definition of the analytical risks involved in the compound identification. Using both the EPA (Federal Register) and Reference 11 approaches will allow a set of working and a set of conservative MDLs to be generated for both the GC/MD and GC/MS analytical systems.

15.4 INTERNAL STANDARD FOR GC/MS ANALYSES

Use of internal standards is recommended for GC/MS analyses for the 1989 UATMP. The internal standards would be injected into both calibration samples and ambient air samples. The use of internal standards requires modification of the sample interface system for the GC/MS. A suggested internal standard gas would contain:

d_8-toluene
d_4-1,2-dichloroethane

d_{10}-ethylbenzene
d_5-chlorobenzene
perfluorotoluene
perfluorobenzene
1,4-difluorobenzene

The use of internal standards will increase the accuracy of all the GC/MS analyses. Modification of the current interface is underway to permit use of internal standards in GC/MS analyses in 1989.

15.5 REPLICATE AND DUPLICATE ANALYSES

It is recommended that all the replicate GC/MD analyses for the UATMP be done on the duplicate samples if canister pressure allows. This approach will allow separation of sampling and analytical precision.

9. McAllister, R. A., P. L. O'Hara, W. H. Moore, D-P. Dayton, J. Rice, R. F. Jongleux, R. G. Merrill, Jr., and J. T. Bursey (Radian Corporation) 1988 Nonmethane Organic Compound and Urban Air Toxics Monitoring Programs. Final Report. Volume I. Nonmethane Organic Compound and Three-Hour Air Toxics Monitoring Program. DCN No. 88-262-045-25. Prepared for Harold G. Richter, Office of Air Quality Planning and Standards, U. S. Environmental Protection Agency and F. F. McElroy and V. Thompson, Atmospheric Research and Exposure Assessment Laboratory, U. S. Environmental Protection Agency, Research Triangle Park, NC. December 1988.

10. U. S. Environmental Protection Agency. Code of Federal Regulations. Title 40, Chapter 1, Part 136, Appendix B. Washington, D.C. Office of the Federal Register, July 1, 1987.

11. Clayton, C. A., J. W. Hines, and P. D. Elkins, "Detection Limits with Specified Assurance Probabilities," Anal. Chem. 1987, 59, 2506.

APPENDIX A

URBAN AIR TOXICS MONITORING PROGRAM SITE DATA SUMMARIES FOR GC/MD ANALYSES

cah.123

APPENDIX A

LIST OF TABLES

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A7 MULTIPLE DETECTOR SPECIATED UATMP DATA FOR DBMI............. A49
A8 MULTIPLE DETECTOR SPECIATED UATMP DATA FOR DLTX............. A57
A9 MULTIPLE DETECTOR SPECIATED UATMP DATA FOR DTMI............. A65
A10 MULTIPLE DETECTOR SPECIATED UATMP DATA FOR H1TX............. A72
A11 MULTIPLE DETECTOR SPECIATED UATMP DATA FOR HAIN............. A80
A12 MULTIPLE DETECTOR SPECIATED UATMP DATA FOR JAFL............. A88
A13 MULTIPLE DETECTOR SPECIATED UATMP DATA FOR L2KY............. A96
A14 MULTIPLE DETECTOR SPECIATED UATMP DATA FOR LAMI............. A104
A15 MULTIPLE DETECTOR SPECIATED UATMP DATA FOR MDMI............. A112
A16 MULTIPLE DETECTOR SPECIATED UATMP DATA FOR MIFL............. A120
A17 MULTIPLE DETECTOR SPECIATED UATMP DATA FOR P2OR............. A128
A18 MULTIPLE DETECTOR SPECIATED UATMP DATA FOR PHMI............. A136
A19 MULTIPLE DETECTOR SPECIATED UATMP DATA FOR SAIL............. A143

TABLE A1. MULTIPLE DETECTOR SPECIATED UATMP DATA SUMMARY FOR ATGA

Sample Date Sample ID	09/30/87 0005	10/12/87 0013	10/24/87 0051	11/05/87 0046	11/17/87 0072D
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	0.41 (L)	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	3.242(M)	<0.001	<0.001	<0.001	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	0.27 (L)	<0.04	<0.04	<0.04	0.84 (L)
Benzene/1,2-Dichloroethane	1.23 (M)	<0.04	<0.04	<0.04	2.25 (M)
Benzene	0.96 (M)	<0.04	<0.04	<0.04	1.41 (M)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	0.73 (M)	<0.02	<0.02	<0.02	<0.02
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	6.80 (M)	<0.04	18.44 (M)	8.27 (M)	<0.04
Styrene/o-Xylene	<0.02	<0.02	<0.02	<0.02	<0.02
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample

TABLE A1. ATGA (Continued)

Sample Date Sample ID	11/17/87 0073D	11/29/87 0100	11/29/87 0100R	12/11/87 0129	12/24/87 0152
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	0.46 (L)	0.45 (L)	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	0.825(H)	<0.006
1,1,1-Trichloroethane	0.530(M)	<0.001	0.224(M)	<0.001	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	1.08 (L)	0.34 (L)	<0.04	0.72 (L)	0.56 (L)
Benzene/1,2-Dichloroethane	2.32 (H)	0.94 (M)	<0.04	2.01 (H)	1.39 (H)
Benzene	1.24 (H)	0.60 (M)	<0.04	1.29 (H)	0.83 (H)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	0.84 (H)	1.41 (M)
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	0.55 (M)
Toluene	<0.02	1.59 (L)	1.04 (H)	4.36 (M)	1.89 (H)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	0.45 (H)
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	0.20 (H)
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	0.21 (H)
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	0.08 (M)
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	0.27 (H)	<0.02	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	3.67 (M)	3.32 (H)	3.32 (H)	10.02 (M)	9.30 (H)
Styrene/o-Xylene	<0.02	0.78 (H)	1.13 (M)	2.32 (M)	1.26 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	0.61 (H)
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	0.55 (H)
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	0.34 (M)

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample R Replicate analysis

TABLE A1. ATGA (Continued)

Sample Date	01/04/88	01/16/88	01/28/88	02/09/88	02/21/88
Sample ID	0167	0201	0216	0227	0246D
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	0.210(H)	<0.001	0.093(H)	0.093(H)	0.294(H)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene	<0.04	<0.04	<0.04	<0.04	<0.04
Trichloroethylene	<0.004	31.475(M)	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	0.46 (H)	<0.02	2.00 (M)	1.59 (L)	0.37 (M)
n-Octane	0.14 (L)	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	0.40 (L)	<0.04	0.24 (H)	<0.04	<0.04
1,1,2-Trichloroethane	0.44 (H)	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	0.42 (M)	0.26 (M)	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	<0.02	0.07 (H)
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	4.63 (H)	2.00 (H)	5.32 (M)	3.96 (H)	0.14 (M)
Styrene/o-Xylene	0.28 (H)	0.46 (L)	1.32 (M)	1.04 (H)	<0.02
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	0.21 (M)	0.05 (L)
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	0.72 (L)
o-Dichlorobenzene	<0.02	<0.02	<0.02	0.33 (L)	0.36 (L)

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample

TABLE A1. ATGA (Continued)

Sample Date Sample ID	02/21/88 0247D	03/05/88 0260	03/16/88 0285	03/28/88 0320	04/09/88 0340
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	0.076(M)	0.681(M)	<0.001	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	1.49 (L)	1.25 (L)	<0.04	<0.04	2.35 (L)
Benzene/1,2-Dichloroethane	1.65 (H)	1.42 (M)	<0.04	<0.04	2.56 (H)
Benzene	0.16 (H)	0.17 (M)	<0.04	<0.04	0.21 (H)
Trichloroethylene	<0.004	<0.004	<0.004	11.665(L)	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	0.41 (M)	0.87 (L)	0.82 (H)	1.33 (H)	1.61 (M)
n-Octane	<0.03	<0.03	<0.03	0.17 (M)	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	0.22 (L)	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	0.12 (M)	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	<0.02	0.15 (M)
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	0.81 (M)
m/p-Xylene	0.97 (H)	0.27 (M)	0.24 (H)	0.36 (M)	0.34 (M)
Styrene/o-Xylene	<0.02	0.52 (M)	<0.02	<0.02	0.31 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	0.10 (L)
p-Dichlorobenzene	0.18 (L)	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample

TABLE A1. ATGA (Continued)

Sample Date Sample ID	04/21/88 0360	05/03/88 0381	05/15/88 0401	05/27/88 0422D	05/27/88 0423D
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	0.85 (H)	0.72 (M)
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	0.94 (M)	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	3.400(H)	2.023(H)	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	<0.001	<0.001	0.810(L)	0.820(M)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	1.86 (L)	1.21 (L)	2.50 (L)	2.91 (L)	2.79 (L)
Benzene/1,2-Dichloroethane	2.01 (H)	1.33 (H)	5.00 (H)	4.11 (M)	3.99 (M)
Benzene	0.15 (H)	0.12 (H)	2.50 (H)	1.20 (M)	1.20 (M)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	1.54 (L)	1.94 (H)	7.16 (H)	4.57 (L)	5.47 (L)
n-Octane	<0 03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	0.17 (L)	<0.02	<0.02	<0.02
Tetrachloroethylene	0.73 (L)	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	0.75 (M)	0.70 (M)
Ethylbenzene	<0.02	<0.02	0.82 (M)	<0.02	<0.02
m/p-Xylene	0.44 (M)	0.30 (L)	5.95 (H)	4.03 (L)	3.94 (L)
Styrene/o-Xylene	0.52 (H)	0.18 (M)	2.02 (H)	1.49 (M)	1.31 (L)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	0.13 (H)	0.06 (M)	<0.02	0.99 (H)	0.72 (M)
p-Dichlorobenzene	1.77 (M)	0.62 (M)	6.71 (H)	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	1.61 (H)	0.42 (L)

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample

TABLE A1. ATGA (Continued)

Sample Date Sample ID	06/11/88 0444	06/11/88 0444R	06/20/88 0459	07/02/88 0478	07/14/88 0509
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	0.46 (L)	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	<0.001	0.749(H)	<0.001	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	0.54 (L)	2.10 (L)	1.94 (L)	<0.04	<0.04
Benzene/1,2-Dichloroethane	1.12 (H)	2.76 (L)	3.77 (H)	<0.04	<0.04
Benzene	0.58 (H)	0.66 (L)	1.83 (H)	0.61 (H)	1.38 (M)
Trichloroethylene	<0.004	<0.004	0.290(H)	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	3.68 (L)	2.76 (H)	5.69 (H)	1.33 (H)	3.24 (H)
n-Octane	<0.03	<0.03	0.39 (M)	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	0.57 (M)	<0.02	<0.02	<0.02
Ethylbenzene	<0.02	<0.02	0.54 (L)	0.18 (H)	0.42 (H)
m/p-Xylene	<0.04	<0.04	4.13 (H)	1.22 (H)	2.64 (H)
Styrene/o-Xylene	<0.02	0.90 (M)	1.20 (H)	0.48 (M)	0.92 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	0.31 (M)	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	4.00 (H)	<0.09	<0.09
o-Dichlorobenzene	0.74 (L)	0.82 (M)	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

R Replicate analysis

TABLE A1. ATGA (Continued)

Sample Date Sample ID	07/27/88 0530	08/07/88 0553	08/19/88 0581D	08/19/88 0581R	08/19/88 0582D
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	3.81 (M)	3.61 (M)	4.45 (L)
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	0.19 (H)	<0.10	0.34 (M)
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	4.82 (H)	5.65 (M)	4.94 (H)
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	1.54 (L)	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	<0.001	1.143(H)	1.111(H)	0.760(H)
Carbon tetrachloride	0.16 (M)	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene	1.20 (H)	0.56 (H)	1.40 (H)	1.32 (H)	1.30 (H)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	0.06 (H)
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	2.85 (L)	1.69 (H)	3.30 (M)	3.68 (H)	3.22 (L)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	0.17 (H)	0.33 (L)	0.18 (H)
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	<0.02	0.16 (L)
Ethylbenzene	0.28 (H)	0.36 (H)	0.48 (H)	0.49 (H)	0.47 (H)
m/p-Xylene	2.01 (H)	2.36 (H)	2.98 (H)	3.05 (H)	3.11 (H)
Styrene/o-Xylene	0.49 (H)	0.47 (H)	0.76 (H)	0.91 (M)	0.79 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample R Replicate analysis

TABLE A1. ATGA (Continued)

Sample Date Sample ID	08/19/88 0582R	08/31/88 0603D	08/31/88 0604D	09/12/88 0622	09/22/88 0651
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	4.74 (L)	<0.10	<0.10	2.55 (H)	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	0.28 (M)	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	6.32 (M)	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	0.746(H)	0.415(M)	0.426 (L)	0.479(H)	0.571(H)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene	1.43 (H)	0.53 (H)	0.73 (H)	1.08 (H)	1.79 (H)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	0.26 (L)	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	3.09 (M)	1.34 (L)	1.15 (M)	2.57 (L)	4.42 (H)
n-Octane	<0.03	0.21 (M)	0.16 (H)	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	0.22 (H)	<0.07	0.13 (H)	<0.07	0.68 (M)
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	0.13 (M)	<0.02	<0.02	<0.02	0.24 (H)
Ethylbenzene	0.42 (H)	0.16 (H)	0.16 (H)	0.50 (M)	0.65 (M)
m/p-Xylene	2.86 (H)	0.88 (H)	0.84 (H)	2.68 (H)	3.91 (M)
Styrene/o-Xylene	0.82 (H)	0.28 (H)	0.16 (M)	0.67 (H)	1.03 (L)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	1.538(H)	1.546(H)	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level

D Duplicate sample R Replicate analysis

TABLE A2. MULTIPLE DETECTOR SPECIATED UATMP DATA SUMMARY FOR BHAL

Sample Date Sample ID	09/30/87 0006	10/12/87 0015	10/24/87 0056	11/05/87 0052	11/17/87 0082
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	2.54 (H)	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	<0.001	2.488(M)	0.516(H)	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	4.24 (L)	4.77 (L)	0.56 (L)	0.89 (L)
Benzene/1,2-Dichloroethane	<0.04	14.98 (M)	8.06 (M)	2.06 (M)	3.36 (H)
Benzene	<0.04	10.74 (M)	3.29 (M)	1.50 (M)	2.47 (H)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	4.36 (L)	<0.04	<0.04
Toluene	1.67 (M)	6.21 (H)	8.35 (H)	1.84 (M)	2.60 (H)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	4.20 (H)	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	0.99 (H)	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	1.88 (M)	<0.02	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	8.92 (H)	20.37 (H)	23.66 (H)	<0.04	10.38 (M)
Styrene/o-Xylene	2.14 (M)	<0.02	5.62 (M)	<0.02	<0.02
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	1.84 (M)	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

TABLE A2. BHAL (Continued)

Sample Date	11/29/87	11/29/87	12/11/87	12/23/87	01/04/88
Sample ID	0101D	0102D	0130	0151	0163
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	<0.001	<0.001	<0.001	0.210(L)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	0.42 (L)	<0.04	1.55 (L)	0.54 (L)	<0.04
Benzene/1,2-Dichloroethane	1.07 (M)	<0.04	4.27 (H)	1.34 (H)	<0.04
Benzene	0.65 (M)	<0.04	2.72 (H)	0.84 (H)	<0.04
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	1.67 (H)	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	0.82 (M)	0.98 (L)	5.56 (M)	1.68 (M)	0.62 (H)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	2.01 (H)	<0.02	<0.02
Ethylbenzene	<0.02	<0.02	161.90 (M)	<0.02	<0.02
m/p-Xylene	2.19 (H)	2.20 (L)	3.16 (M)	5.58 (M)	1.11 (H)
Styrene/o-Xylene	0.66 (H)	0.37 (L)	<0.02	1.40 (H)	0.28 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	0.73 (M)	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample

TABLE A2. BHAL (Continued)

Sample Date Sample ID	01/16/88 0205	01/28/88 0193	02/09/88 0223	02/21/88 0255	03/05/88 0263D
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	0.116(H)	0.066(H)	0.137(M)	0.118(H)	0.059(M)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	25.72 (L)	1.35 (L)	1.77 (L)
Benzene/1,2-Dichloroethane	<0.04	<0.04	32.10 (L)	1.46 (H)	1.96 (H)
Benzene	<0.04	<0.04	6.38 (L)	0.11 (L)	0.19 (H)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	2.00 (H)	3.13 (M)	6.30 (L)	<0.02	0.82 (M)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	0.05 (H)	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	7.07 (H)	6.74 (H)	13.39 (H)	0.22 (L)	0.36 (L)
Styrene/o-Xylene	1.50 (H)	1.93 (M)	3.77 (H)	0.12 (L)	0.15 (L)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	0.37 (M)	<0.02	<0.02
p-Dichlorobenzene	3.69 (H)	<0.09	<0.09	0.33 (H)	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample

TABLE A2. BHAL (Continued)

Sample Date Sample ID	03/05/88 0264D	03/16/88 0284	03/16/88 0284R	03/28/88 0273	04/09/88 0338
	Concentration, ppbv				
Compound					
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	0.08 (L)	0.30 (L)	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	0.133(M)	0.050(L)	0.043(H)	<0.001	0.272(H)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	1.81 (L)	<0.04	<0.04	5.54 (L)	2.70 (L)
Benzene/1,2-Dichloroethane	2.00 (H)	<0.04	<0.04	6.20 (M)	3.00 (H)
Benzene	0.19 (H)	<0.04	<0.04	0.66 (M)	0.30 (H)
Trichloroethylene	<0.004	<0.004	<0.004	0.237(L)	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	0.77 (L)	0.45 (M)	0.45 (M)	1.95 (M)	1.76 (L)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	0.37 (L)	0.26 (L)	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	0.26 (L)	0.09 (L)	0.09 (M)	0.39 (L)	0.38 (L)
Styrene/o-Xylene	0.15 (L)	<0.02	<0.02	0.24 (M)	0.26 (L)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	0.59 (L)	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(Continued)

(H) High confidence level (M) Medium confidence level (L) Low confidence level

D Duplicate sample R Replicate analysis

TABLE A2. BHAL (Continued)

Sample Date	04/21/88	05/03/88	05/15/88	05/15/88	05/27/88
Sample ID	0359	0371	0397	0397R	0415
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	0.500(M)	1.213(H)	1.362(M)	1.072(L)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	1.33 (L)	3.36 (L)	1.93 (L)	2.01 (L)	4.31 (L)
Benzene/1,2-Dichloroethane	1.47 (H)	3.74 (H)	4.84 (M)	5.08 (M)	10.21 (M)
Benzene	0.14 (H)	0.38 (H)	2.91 (M)	3.07 (M)	5.90 (M)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	0.86 (M)	3.57 (H)	4.81 (H)	3.99 (M)	<0.02
n-Octane	<0.03	<0.03	1.24 (H)	<0.03	2.43 (H)
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	<0.02	1.02 (H)
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	1.51 (M)
m/p-Xylene	0.20 (L)	0.83 (H)	5.41 (M)	3.76 (L)	9.60 (M)
Styrene/o-Xylene	0.76 (H)	0.49 (L)	2.47 (M)	1.68 (L)	2.84 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	0.083(L)	0.190(H)	<0.002
m-Dichlorobenzene	<0.02	0.12 (M)	<0.02	<0.02	1.14 (H)
p-Dichlorobenzene	<0.09	<0.09	4.35 (L)	3.54 (H)	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

R Replicate analysis

TABLE A2. BHAL (Continued)

Sample Date Sample ID	06/08/88 04390	06/08/88 0440D	06/20/88 0460	07/02/88 0486	07/14/88 0506
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	0.904(M)	0.934(M)	0.692(H)	0.519(H)	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	2.15 (L)	2.14 (L)	1.53 (L)	<0.04	<0.04
Benzene/1,2-Dichloroethane	4.51 (H)	4.43 (H)	3.47 (H)	<0.04	<0.04
Benzene	2.36 (H)	2.29 (H)	1.94 (H)	2.16 (H)	0.79 (H)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	4.55 (H)	3.77 (H)	4.84 (H)	3.91 (H)	1.75 (H)
n-Octane	0.94 (H)	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	0.46 (H)	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	0.78 (L)	<0.02	<0.02	0.45 (H)	0.22 (H)
m/p-Xylene	3.80 (H)	3.12 (M)	4.84 (H)	3.08 (H)	1.49 (H)
Styrene/o-Xylene	1.32 (H)	0.94 (H)	1.90 (H)	0.76 (H)	0.38 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	6.26 (H)	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample

TABLE A2. BHAL (Continued)

Sample Date Sample ID	07/27/88 0527	08/07/88 0549	08/07/88 0549R	08/19/88 0578	08/31/88 0599
Compound	Concentration, ppbv				
Acetylene	1.69 (L)	<1.00	<1.00	6.00 (L)	<1.00
Propylene	<0.10	<0.10	<0.10	2.92 (L)	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	0.491(H)	<0.001	<0.001	0.316(L)	1.185(L)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene	1.54 (H)	0.56 (H)	0.52 (H)	1.24 (H)	0.65 (L)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	2.97 (H)	1.58 (L)	1.37 (M)	2.71 (L)	1.27 (M)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	0.31 (M)
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	0.07 (M)	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	0.07 (H)	<0.02
Ethylbenzene	0.37 (H)	0.15 (M)	0.17 (H)	0.22 (H)	0.18 (H)
m/p-Xylene	2.56 (H)	1.31 (H)	1.16 (H)	1.50 (H)	1.10 (H)
Styrene/o-Xylene	0.63 (H)	0.28 (M)	0.30 (H)	0.50 (H)	0.36 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	2.300(H)
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

R Replicate analysis

TABLE A2. BHAL (Continued)

Sample Date Sample ID	09/12/88 0626D	09/12/88 0627D	09/24/88 0645 (a)
Compound	Concentration, ppbv		
Acetylene	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20
1,3-Butadiene	0.37 (H)	0.42 (H)	<0.10
Bromomethane	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	0.55 (L)	0.32 (L)	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04
Chloroprene	0.23 (L)	0.59 (M)	<0.06
Bromochloromethane	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	0.443(H)	0.594(H)	0.350(M)
Carbon tetrachloride	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	<0.04	<0.04	<0.04
Benzene	1.69 (H)	1.68 (H)	1.05 (H)
Trichloroethylene	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04
Toluene	4.36 (L)	4.69 (L)	1.47 (H)
n-Octane	<0.03	<0.03	0.06 (M)
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	0.13 (H)
Tetrachloroethylene	0.10 (L)	<0.07	0.18 (L)
Dibromochloromethane	<0.001	<0.001	<0.001
Chlorobenzene	0.09 (H)	0.10 (M)	<0.02
Ethylbenzene	0.51 (M)	0.55 (M)	0.25 (M)
m/p-Xylene	3.31 (M)	3.58 (M)	1.61 (M)
Styrene/o-Xylene	0.90 (L)	0.95 (H)	0.50 (H)
Bromoform	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02
p-Dichlorobenzene	0.80 (L)	0.67 (L)	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level

(a) Sampled for 20 hours

D Duplicate sample

TABLE A3. MULTIPLE DETECTOR SPECIATED UATMP DATA SUMMARY FOR BRLA

Sample Date Sample ID	09/30/87 0020	10/12/87 0016	10/24/87 0055	10/24/87 0055R	11/05/87 0048
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	3.28 (M)
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	<0.001	<0.001	<0.001	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	1.44 (L)	0.43 (L)	<0.04	0.22 (L)	0.89 (L)
Benzene/1,2-Dichloroethane	5.35 (M)	2.13 (M)	<0.04	0.75 (M)	3.99 (M)
Benzene	3.91 (M)	1.70 (M)	<0.04	0.50 (M)	3.10 (M)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	2.86 (L)	1.54 (L)	<0.02	<0.02	2.32 (H)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	0.72 (M)	<0.02	<0.02	1.63 (H)
Ethylbenzene	<0.02	7.80 (H)	<0.02	<0.02	10.88 (M)
m/p-Xylene	9.00 (L)	2.38 (M)	<0.04	<0.04	4.35 (H)
Styrene/o-Xylene	2.96 (M)	<0.02	3.90 (H)	1.39 (M)	<0.02
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	1.85 (M)	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level

(Continued)

R Replicate analysis

TABLE A3. BRLA (Continued)

Sample Date Sample ID	11/17/87 0076	11/17/87 0076R	11/29/87 0099	12/11/87 0126	12/23/87 0155
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	<0.001	<0.001	<0.001	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	1.41 (L)	1.95 (L)	2.64 (L)	0.32 (L)	0.57 (L)
Benzene/1,2-Dichloroethane	2.11 (M)	2.61 (M)	3.65 (L)	1.02 (M)	2.22 (M)
Benzene	0.70 (M)	0.66 (M)	1.01 (L)	0.70 (M)	1.65 (M)
Trichloroethylene	<0.004	<0.004	<0.004	1.104(M)	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	2.36 (M)
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	1.84 (H)	2.51 (H)	1.20 (H)	1.15 (M)	3.13 (H)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	6.13 (L)	9.00 (M)	<0.03	0.31 (H)	<0.03
trans-1,3-Dichloropropylene	0.52 (L)	0.54 (M)	<0.04	0.08 (H)	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	3.44 (M)	3.86 (M)	1.21 (H)	1.51 (H)	8.13 (M)
Styrene/o-Xylene	1.46 (L)	1.06 (M)	0.35 (M)	<0.02	5.55 (M)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	0.64 (L)	0.98 (M)	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

R Replicate analysis

TABLE A3. BRLA (Continued)

Sample Date	01/04/88	01/16/88	01/16/88	01/28/88	02/09/88
Sample ID	0168	0210D	0211D	0218	0214
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	0.146(H)	<0.001	0.163(H)	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	5.22 (L)	1.24 (L)	1.03 (L)	<0.04	3.64 (L)
Benzene/1,2-Dichloroethane	5.60 (H)	1.37 (H)	1.16 (M)	<0.04	3.80 (H)
Benzene	0.38 (H)	0.13 (H)	0.13 (M)	<0.04	0.16 (H)
Trichloroethylene	<0.004	<0.004	<0.004	0.980(L)	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	0.62 (M)	0.75 (L)	0.92 (M)	1.74 (M)	2.87 (H)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	0.42 (L)	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	0.69 (H)	1.17 (L)	0.78 (H)	3.99 (H)	4.74 (L)
Styrene/o-Xylene	0.28 (L)	<0.02	<0.02	1.10 (M)	1.62 (L)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	0.52 (M)
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample

TABLE A3. BRLA (Continued)

Sample Date Sample ID	02/21/88 0248D	02/21/88 0249D	03/05/88 0259	03/16/88 0281	03/16/88 0281R
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	0.133(M)	<0.001	<0.001	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	1.40 (L)	1.34 (L)	1.11 (L)	<0.04	<0.04
Benzene/1,2-Dichloroethane	1.60 (M)	1.56 (L)	1.24 (M)	<0.04	<0.04
Benzene	0.20 (M)	0.22 (L)	0.13 (M)	<0.04	<0.04
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	0.77 (M)	0.62 (L)	1.13 (M)	0.56 (M)	0.62 (M)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.02	<0.02	<0.02
Dibromochloromethane	<0.001	<0.001	<0.07	<0.07	<0.07
Chlorobenzene	<0.02	<0.02	<0.001	<0.001	<0.001
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	<0.04	<0.04	<0.02	<0.02	<0.02
Styrene/o-Xylene	<0.02	<0.02	<0.04	0.20 (H)	0.14 (H)
Bromoform	<0.001	<0.001	<0.02	0.12 (L)	0.09 (L)
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.001	<0.001	<0.001
m-Dichlorobenzene	<0.02	0.12 (M)	<0.002	<0.002	<0.002
p-Dichlorobenzene	0.46 (M)	0.20 (L)	<0.02	<0.02	<0.02
o-Dichlorobenzene	<0.02	<0.02	<0.09	<0.09	<0.09
			<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample R Replicate analysis

TABLE A3. BRLA (Continued)

Sample Date Sample ID	03/28/88 0314	04/09/88 0333	04/21/88 0364	05/03/88 0377	05/27/88 0418D
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	4.810(M)	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	0.193(H)	0.224(L)	0.254(M)	0.665(L)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	0.74 (L)	1.34 (L)	1.60 (L)	1.56 (L)	<0.04
Benzene/1,2-Dichloroethane	0.82 (H)	1.66 (H)	1.80 (M)	1.80 (L)	<0.04
Benzene	0.08 (H)	0.32 (H)	0.20 (M)	0.24 (L)	<0.04
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	1.13 (L)	1.38 (L)	1.67 (H)	1.75 (H)	3.40 (L)
n-Octane	0.68 (M)	1.73 (H)	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	<0.02	0.36 (L)	0.46 (M)	<0.02	<0.02
m/p-Xylene	<0.04	0.59 (L)	0.22 (M)	0.25 (L)	3.25 (L)
Styrene/o-Xylene	0.89 (L)	0.53 (L)	0.57 (H)	0.22 (L)	1.39 (L)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	0.10 (M)	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample

TABLE A3. BRLA (Continued)

Sample Date	05/27/88	06/08/88	06/08/88	06/20/88	07/02/88
Sample ID	0419D	0436	0436R	0457	0482
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	0.568(L)	0.604(H)	0.657(L)	<0.001	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	1.49 (L)	2.69 (L)	1.68 (L)	<0.04
Benzene/1,2-Dichloroethane	<0.04	3.60 (M)	4.58 (H)	3.08 (H)	<0.04
Benzene	<0.04	2.11 (M)	1.89 (H)	1.40 (H)	0.26 (H)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	3.01 (L)	5.05 (M)	5.87 (M)	3.36 (H)	0.51 (H)
n-Octane	<0.03	2.22 (M)	1.14 (L)	0.30 (H)	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	0.64 (H)	<0.02	<0.02	0.15 (L)	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	0.29 (M)	<0.02
m/p-Xylene	2.03 (L)	3.49 (L)	2.46 (L)	2.70 (H)	0.48 (M)
Styrene/o-Xylene	1.09 (L)	1.99 (M)	1.64 (L)	1.04 (H)	<0.02
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	0.130(L)	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	0.54 (M)	<0.02
p-Dichlorobenzene	<0.09	<0.09	0.76 (M)	14.46 (H)	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample R Replicate analysis

TABLE A3. BRLA (Continued)

Sample Date Sample ID	07/14/88 0505	07/27/88 0528	08/07/88 0551	08/19/88 0577	08/31/88 0605D
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	8.12 (M)	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	0.05 (L)
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	0.98 (L)	0.19 (L)
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	0.241(M)	<0.001	1.084(H)	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene	1.76 (H)	1.02 (M)	1.13 (H)	2.03 (H)	0.89 (H)
Trichloroethylene	<0.004	<0.004	<0.004	0.129(M)	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	1.13 (L)	2.17 (H)	4.92 (H)	9.04 (H)	1.35 (L)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	1.02 (L)	<0.02	0.08 (L)	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	0.24 (L)	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	0.26 (M)	<0.02
Ethylbenzene	<0.02	0.18 (H)	0.13 (H)	0.63 (M)	0.21 (H)
m/p-Xylene	1.00 (H)	1.36 (H)	1.00 (H)	3.54 (H)	0.99 (H)
Styrene/o-Xylene	0.27 (H)	0.22 (H)	0.27 (H)	1.25 (H)	0.33 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	0.101(H)
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample

TABLE A3. BRLA (Continued)

Sample Date Sample ID	08/31/88 0606D	09/12/88 0619	09/24/88 0649D	09/24/88 0650D
Compound	Concentration, ppbv			
Acetylene	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	1.17 (M)	0.13 (H)	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	0.58 (L)	0.34 (H)
Bromochloromethane	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	0.398(L)	0.276(L)	0.289(L)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04
Benzene	0.99 (H)	1.48 (H)	1.24 (H)	1.37 (H)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	0.51 (H)	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04
Toluene	1.96 (L)	2.55 (H)	1.29 (L)	1.17 (L)
n-Octane	<0.03	<0.03	<0.03	0.14 (L)
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	0.06 (H)	1.55 (H)
Tetrachloroethylene	<0.07	0.11 (L)	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	0.19 (L)	0.02 (M)	<0.02
Ethylbenzene	0.21 (H)	0.37 (M)	0.14 (H)	0.15 (H)
m/p-Xylene	1.10 (H)	2.01 (H)	1.47 (H)	1.09 (H)
Styrene/o-Xylene	0.36 (M)	0.55 (H)	0.30 (H)	0.28 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	0.72 (L)	1.16 (L)
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level

R Replicate analysis

TABLE A4. MULTIPLE DETECTOR SPECIATED UATMP DATA SUMMARY FOR BRVT

Sample Date Sample ID	09/30/87 0030	10/12/87 0019	10/24/87 0062	10/24/87 0062R	11/05/87 0037
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	0.25 (L)	0.25 (H)
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	<0.001	0.494(M)	0.526(L)	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	0.21 (L)	0.37 (L)	0.21 (L)
Benzene/1,2-Dichloroethane	<0.04	<0.04	1.48 (H)	1.74 (M)	1.74 (H)
Benzene	<0.04	<0.04	1.27 (H)	1.37 (L)	1.53 (H)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	<0.02	2.78 (M)	2.48 (M)	1.91 (M)	1.91 (H)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	4.68 (M)	<0.03	1.25 (L)	1.57 (L)	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	0.99 (L)	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	0.65 (L)	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	9.09 (M)	13.40 (H)	10.32 (H)	11.82 (M)	7.11 (H)
Styrene/o-Xylene	<0.02	<0.02	<0.02	<0.02	1.70 (M)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

R Replicate analysis

TABLE A4. BRVT (Continued)

Sample Date Sample ID	11/05/87 0037R	11/17/87 0080	11/29/87 0103D	11/29/87 0104D	12/11/87 0128
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	0.47 (L)	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	0.266(M)	<0.001	0.707(H)	0.778(H)	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	0.27 (L)	1.18 (L)	0.54 (L)	0.46 (L)	1.13 (L)
Benzene/1,2-Dichloroethane	1.77 (M)	1.74 (M)	1.29 (M)	1.13 (M)	2.69 (H)
Benzene	1.50 (M)	0.56 (M)	0.75 (M)	0.67 (M)	1.56 (H)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	1.93 (L)	1.94 (H)	1.43 (M)	1.49 (L)	3.30 (M)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	2.86 (H)	0.60 (L)	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	1.17 (H)	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	7.04 (L)	4.20 (H)	3.45 (H)	3.34 (L)	10.40 (H)
Styrene/o-Xylene	1.66 (L)	0.83 (L)	0.88 (H)	0.62 (L)	2.49 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample R Replicate analysis

TABLE A4. BRVT (Continued)

Sample Date Sample ID	12/23/87 0153	01/04/88 0162	01/16/88 0203	01/27/88 0225	02/09/88 0244
Compound			Concentration, ppbv		
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	0.533(L)	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	<0.001	0.042(L)	0.050(H)	0.043(H)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene	<0.04	<0.04	<0.04	<0.04	<0.04
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	1.39 (H)	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	3.07 (H)	0.56 (H)	0.97 (M)	1.18 (L)	1.13 (M)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	0.99 (H)	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	0.21 (H)	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	0.86 (M)	0.09 (M)	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	0.14 (M)	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	13.04 (H)	1.19 (H)	1.97 (H)	3.44 (H)	2.47 (H)
Styrene/o-Xylene	3.90 (M)	0.40 (H)	0.55 (H)	1.01 (M)	0.52 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	0.135(M)	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	0.74 (M)	<0.02
p-Dichlorobenzene	0.17 (M)	<0.09	<0.09	1.98 (L)	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	0.88 (L)	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

TABLE A4. BRVT (Continued)

Sample Date Sample ID	02/21/88 0250	02/21/88 0250R	03/05/88 0262	03/16/88 0292	03/28/88 0319
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	0.036(H)	<0.001	<0.001	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene	<0.04	<0.04	<0.04	<0.04	<0.04
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	0.56 (M)	0.62 (M)	1.28 (H)	1.79 (M)	1.64 (L)
n-Octane	<0.03	<0.03	<0.03	0.48 (H)	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	0.10 (H)	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	1.05 (H)	1.02 (H)	0.58 (H)	0.75 (M)	0.61 (M)
Styrene/o-Xylene	0.15 (H)	0.18 (H)	0.21 (H)	0.34 (M)	0.40 (M)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	0.08 (L)	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	0.08 (H)	<0.02	<0.02

(Continued)

(H) High confidence level (M) Medium confidence level (L) Low confidence level

R Replicate analysis

TABLE A4. BRVT (Continued)

Sample Date	04/09/88	04/21/88	05/03/88	05/03/88	05/15/88
Sample ID	0337	0363	0379D	0380D	0398D
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	0.39 (H)
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	0.180(H)	<0.001	2.057(H)	<0.001	0.570 (H)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	1.68 (L)	<0.04	0.85 (L)
Benzene/1,2-Dichloroethane	<0.04	<0.04	1.82 (H)	<0.04	1.36 (H)
Benzene	<0.04	<0.04	0.14 (H)	<0.04	0.51 (H)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	1.44 (H)	2.54 (H)	2.28 (M)	7.11 (H)	1.01 (L)
n-Octane	<0.03	1.46 (M)	<0.03	1.62 (H)	0.55 (L)
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	0.18 (H)	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	0.94 (L)	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	0.35 (M)	0.84 (M)	0.32 (L)	4.18 (H)	0.91 (L)
Styrene/o-Xylene	0.30 (M)	<0.02	<0.02	2.97 (L)	0.58 (L)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	0.87 (L)	<0.09	0.50 (M)	1.35 (M)	0.84 (H)
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample

TABLE A4. BRVT (Continued)

Sample Date	05/15/88	05/27/88	05/27/88	06/08/88	06/20/88
Sample ID	0399D	0416	0416R	0442	0463
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	0.184(L)	<0.006
1,1,1-Trichloroethane	0.542(L)	0.675(L)	0.648(L)	0.673(L)	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	0.85 (L)	1.61 (L)	1.60 (L)	1.19 (L)	2.45 (L)
Benzene/1,2-Dichloroethane	1.58 (H)	3.35 (H)	3.06 (H)	2.32 (H)	3.39 (M)
Benzene	0.73 (H)	1.74 (H)	1.46 (H)	1.13 (H)	0.94 (M)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	1.73 (L)	7.31 (L)	5.69 (L)	3.28 (L)	4.26 (L)
n-Octane	<0.03	1.98 (H)	1.26 (H)	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	0.98 (H)	0.74 (M)	<0.02	<0.02
Ethylbenzene	<0.02	1.37 (M)	1.26 (L)	<0.02	3.42 (H)
m/p-Xylene	1.68 (L)	8.93 (M)	7.22 (M)	3.04 (L)	10.51 (H)
Styrene/o-Xylene	0.99 (M)	3.44 (M)	2.90 (L)	1.64 (L)	4.03 (M)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	1.20 (H)	0.90 (L)	<0.02	0.67 (L)
p-Dichlorobenzene	1.00 (M)	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	1.97 (H)	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample

R Replicate analysis

TABLE A4. BRVT (Continued)

Sample Date Sample ID	07/02/88 0481	07/10/88 0490	07/14/88 0501	07/28/88 0526	08/07/88 0548
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	2.23 (M)	<0.10	<0.10	<0.10	2.10 (M)
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	0.53 (M)	<0.10	<0.10	0.51 (H)
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	<0.001	<0.001	0.376(H)	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene	1.14 (H)	1.01 (M)	1.46 (M)	1.17 (H)	1.04 (H)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	2.40 (H)	2.34 (H)	3.50 (H)	3.32 (H)	2.58 (L)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	3.08 (H)	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	0.52 (H)	0.32 (H)	0.44 (H)	0.33 (H)	0.32 (H)
m/p-Xylene	2.60 (H)	2.08 (H)	2.80 (H)	2.51 (H)	2.10 (H)
Styrene/o-Xylene	1.05 (H)	0.62 (H)	0.75 (H)	0.65 (H)	0.56 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

TABLE A4. BRVT (Continued)

Sample Date	08/19/88	08/31/88	09/12/88	09/12/88	09/12/88
Sample ID	0583	0598	0620D	0620R	0621D
Compound	Concentration, ppbv				
Acetylene	15.35 (L)	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	3.10 (M)	3.32 (H)	3.30 (L)	3.19 (L)
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	0.30 (H)	0.27 (H)	0.43 (H)	0.57 (H)	0.45 (H)
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	0.26 (L)	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	0.41 (M)	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	0.08 (H)	0.11 (H)	0.53 (L)
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	0.376(M)	0.295(H)	0.323(H)	0.351(L)	0.337(M)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene	1.93 (H)	1.73 (H)	1.69 (H)	1.61 (H)	1.43 (H)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	0.31 (H)	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	3.63 (H)	3.58 (H)	2.71 (M)	2.68 (H)	2.86 (H)
n-Octane	<0.03	0.12 (M)	0.10 (M)	0.13 (H)	0.13 (L)
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	0.10 (H)	<0.07	0.25 (L)	0.11 (M)	0.18 (L)
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	0.08 (L)	0.07 (M)	<0.02
Ethylbenzene	0.56 (H)	0.53 (H)	0.39 (H)	0.40 (H)	0.39 (H)
m/p-Xylene	3.25 (H)	3.34 (H)	2.58 (H)	2.69 (H)	2.65 (H)
Styrene/o-Xylene	0.88 (H)	0.90 (H)	0.72 (H)	0.72 (M)	0.72 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	0.49 (L)	0.15 (L)	0.69 (L)
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level

D Duplicate sample R Replicate analysis

TABLE A4. BRVT (Continued)

Sample Date	09/12/88	09/24/88
Sample ID	0621R	0648
Compound	Concentration, ppbv	
Acetylene	<1.00	<1.00
Propylene	2.78 (M)	4.30 (M)
Chloromethane	<0.20	<0.20
Vinyl chloride	<0.20	<0.20
1,3-Butadiene	0.63 (M)	<0.10
Bromomethane	<0.20	<0.20
Chloroethane	<0.10	<0.10
Methylene chloride	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04
Chloroprene	0.11 (L)	<0.06
Bromochloromethane	<0.003	<0.003
Chloroform	<0.006	1.936(M)
1,1,1-Trichloroethane	0.341(M)	1.057(L)
Carbon tetrachloride	0.177(L)	<0.001
1,2-Dichloroethane	<0.04	<0.04
Benzene/1,2-Dichloroethane	<0.04	<0.04
Benzene	1.68 (H)	2.36 (H)
Trichloroethylene	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04
Toluene	2.92 (M)	4.08 (M)
n-Octane	0.09 (L)	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02
Tetrachloroethylene	0.15 (H)	<0.07
Dibromochloromethane	<0.001	<0.001
Chlorobenzene	<0.02	0.08 (H)
Ethylbenzene	0.42 (H)	1.09 (M)
m/p-Xylene	2.68 (H)	5.13 (M)
Styrene/o-Xylene	0.73 (H)	2.20 (H)
Bromoform	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02
p-Dichlorobenzene	0.62 (L)	<0.09
o-Dichlorobenzene	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level

R Replicate analysis

TABLE A5. MULTIPLE DETECTOR SPECIATED UATMP DATA SUMMARY FOR C4IL/C5IL

Sample Date Sample ID	10/12/87 0107	10/24/87 0058	11/11/87 0063	11/11/87 0063R	11/23/87 0084
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	5.70 (L)	5.90 (L)	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	0.62 (M)	1.62 (M)	<0.06	<0.06	4.87 (L)
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	3.186(M)	1.797(M)	1.745 (H)	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	0.35 (L)	<0.04	0.40 (L)	<0.04
Benzene/1,2-Dichloroethane	<0.04	7.18 (H)	<0.04	1.19 (M)	<0.04
Benzene	<0.04	6.83 (H)	<0.04	0.79 (M)	<0.04
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	2.51 (H)	14.20 (L)	1.39 (H)	1.36 (H)	<0.02
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	14.74 (M)	<0.03	<0.03	3.84 (H)
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	2.75 (M)	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	3.59 (M)	<0.02	<0.02	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	9.97 (H)	67.10 (H)	5.55 (H)	5.85 (H)	9.32 (M)
Styrene/o-Xylene	1.59 (M)	12.03 (H)	0.85 (H)	1.40 (L)	<0.02
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	2.40 (H)	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	3.74 (M)	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

R Replicate analysis

TABLE A5. C4IL/C5IL (Continued)

Sample Date Sample ID	12/11/87 0133	12/17/87 0145	12/29/87 0161	01/10/88 0165	01/25/88 0189D
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	0.29 (M)	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	<0.001	<0.001	<0.001	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	0.23 (L)	0.27 (L)	<0.04	1.63 (L)	1.09 (L)
Benzene/1,2-Dichloroethane	0.71 (M)	1.18 (H)	<0.04	1.83 (M)	1.39 (L)
Benzene	0.48 (M)	0.91 (H)	<0.04	0.20 (M)	0.30 (L)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	1.93 (H)	0.39 (H)	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	1.63 (H)	1.10 (H)	0.93 (H)	1.13 (H)	0.36 (M)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	4.18 (H)	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	0.25 (L)	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	0.18 (H)	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	2.30 (H)	<0.02
m/p-Xylene	5.99 (H)	5.18 (H)	3.11 (H)	0.74 (H)	0.61 (H)
Styrene/o-Xylene	1.71 (M)	1.08 (H)	0.32 (H)	<0.02	0.18 (L)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	0.07 (M)	0.10 (L)	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample

TABLE A5. C4IL/C5IL (Continued)

Sample Date Sample ID	01/25/88 0190D	02/03/88 0233	02/15/88 0236	02/27/88 0277	02/27/88 0277R
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	1.23 (H)	1.23 (M)
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	0.090(H)	0.137(M)	0.200(H)	0.151(M)	0.198(H)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	0.87 (L)	<0.04	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	1.00 (L)	<0.04	<0.04	<0.04	<0.04
Benzene	0.13 (L)	<0.04	<0.04	<0.04	<0.04
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	0.65 (L)	0.19 (L)
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	0.44 (M)	<0.04	<0.04	<0.04	<0.04
Toluene	0.31 (M)	1.13 (L)	2.05 (L)	0.92 (M)	0.82 (L)
n-Octane	<0.03	<0.03	0.38 (L)	0.20 (M)	0.14 (L)
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	0.44 (M)	0.25 (M)	<0.02	<0.02
Ethylbenzene	<0.02	3.94 (H)	5.74 (H)	<0.02	<0.02
m/p-Xylene	0.50 (H)	1.47 (M)	1.26 (H)	0.39 (H)	0.42 (H)
Styrene/o-Xylene	0.12 (H)	<0.02	<0.02	0.15 (H)	0.18 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	0.45 (L)	0.02 (L)	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample R Replicate analysis

TABLE A5. C4IL/C5IL (Continued)

Sample Date Sample ID	03/10/88 0299	04/03/88 0321	06/25/88 0464 (a)	06/26/88 0465 (a)	06/26/88 0465R (a)
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	1.58 (H)	1.41 (M)
trans-1,2-Dichloroethylene	1.15 (M)	2.35 (M)	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	0.167(H)	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	<0.001	<0.001	0.872(H)	0.614(H)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	2.19 (L)	1.03 (L)	0.91 (L)	0.69 (L)
Benzene/1,2-Dichloroethane	<0.04	2.46 (M)	1.42 (M)	1.55 (H)	1.18 (L)
Benzene	<0.04	0.27 (M)	0.39 (M)	0.64 (H)	0.49 (L)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	2.77 (M)	2.85 (M)	1.50 (M)	2.12 (H)	1.40 (H)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	0.33 (L)	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	0.36 (L)	0.23 (L)
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	0.29 (M)	<0.02	<0.02	0.07 (H)	0.07 (L)
Ethylbenzene	<0.02	<0.02	0.32 (H)	0.31 (H)	0.26 (H)
m/p-Xylene	1.25 (H)	0.65 (M)	0.75 (H)	1.42 (H)	0.98 (H)
Styrene/o-Xylene	0.52 (H)	0.43 (H)	0.59 (H)	0.52 (M)	<0.02
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	0.07 (L)	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	6.64 (H)	<0.09
o-Dichlorobenzene	<0.02	<0.02	0.56 (L)	<0.02	0.81 (M)

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

(a) Sample collected at relocated site C5IL

R Replicate analysis

TABLE A5. C4IL/C5IL (Continued)

Sample Date Sample ID	07/08/88 0498 (a)	07/08/88 0498R (a)	07/20/88 0515D (a)(b)	07/20/88 0516D (a)(b)	07/26/88 0525 (a)
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	21.41 (L)
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	0.566(H)	0.649(L)	1.120(L)	2.506(H)	1.686(H)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene	1.15 (M)	1.13 (M)	0.35 (H)	0.48 (M)	0.89 (H)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	0.349(L)
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	1.90 (H)	1.92 (L)	125.67 (H)	329.30 (H)	3.06 (H)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	37.78 (L)	92.73 (L)	0.49 (L)
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	0.16 (H)	0.17 (H)	0.22 (H)	0.26 (H)	0.30 (H)
m/p-Xylene	0.99 (H)	0.95 (H)	2.03 (H)	2.13 (H)	1.97 (H)
Styrene/o-Xylene	0.26 (H)	0.18 (H)	0.48 (H)	0.45 (H)	0.29 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

(a) Sample collected at relocated site C5IL

(b) Sampled for 12 hours

D Duplicate sample R Replicate analysis

TABLE A5. C4IL/C5IL (Continued)

Sample Date Sample ID	08/01/88 0533D (a)	08/01/88 0534D (a)	08/07/88 0546 (a)	08/13/88 0560 (a)	08/17/88 0570 (a)
Compound			Concentration, ppbv		
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	0.80 (H)	1.14 (L)	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	0.23 (L)	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	0.552(L)	0.579(L)	1.098(H)	3.992(H)	0.897(H)
Carbon tetrachloride	<0.001	<0.001	0.169(M)	<0.001	<0.001
1,2-Dichloroethane	0.06 (L)	0.08 (L)	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene	0.66 (H)	0.68 (H)	0.78 (H)	0.89 (H)	1.21 (H)
Trichloroethylene	<0.004	<0.004	<0.004	0.247(H)	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	1.73 (H)	1.76 (H)	2.27 (L)	8.96 (H)	3.67 (H)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	1.12 (L)	0.57 (H)	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	0.37 (L)
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	0.15 (H)	0.16 (H)
Ethylbenzene	0.14 (M)	0.15 (M)	0.20 (H)	0.75 (H)	0.64 (H)
m/p-Xylene	1.59 (H)	1.62 (H)	1.62 (H)	4.51 (H)	4.55 (H)
Styrene/o-Xylene	0.32 (H)	0.26 (M)	0.16 (L)	1.16 (H)	0.92 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

(a) Sample collected at relocated site C5IL

D Duplicate sample

TABLE A5. C4IL/C5IL (Continued)

Sample Date Sample ID	08/25/88 0584 (a)	08/31/88 0597 (a)	09/09/88 0618 (a)	09/18/88 0634 (a)
Compound		Concentration, ppbv		
Acetylene	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20
Chloroethane	0.41 (L)	0.29 (L)	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	0.715(H)	0.935(H)	0.177(H)	0.459(H)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04
Benzene	6.02 (H)	1.17 (H)	1.57 (M)	0.31 (L)
Trichloroethylene	0.246(L)	0.324(H)	0.123(L)	<0.004
1,2-Dichloropropane	<0.04	0.34 (M)	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	0.268(L)	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04
Toluene	3.43 (H)	2.51 (H)	3.14 (H)	2.71 (L)
n-Octane	<0.03	<0.03	0.18 (M)	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	0.09 (H)
Tetrachloroethylene	0.34 (M)	<0.07	0.16 (H)	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	0.19 (L)	<0.02	0.12 (M)	0.06 (L)
Ethylbenzene	0.60 (H)	0.68 (M)	0.36 (H)	0.04 (H)
m/p-Xylene	3.53 (H)	4.77 (H)	2.78 (M)	0.55 (M)
Styrene/o-Xylene	0.82 (H)	2.03 (L)	0.62 (M)	<0.02
Bromoform	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	0.497(H)	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	0.03 (L)

(H) High confidence level (M) Medium confidence level (L) Low confidence level

(a) Sample collected at relocated site C5IL

TABLE A6. MULTIPLE DETECTOR SPECIATED UATMP DATA SUMMARY FOR CLOH

Sample Date Sample ID	09/24/87 0032	10/08/87 0027	10/20/87 0060	11/07/87 0043	11/07/87 0043R
Compound			Concentration, ppbv		
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	<0.001	6.078(M)	2.277(H)	2.194(H)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	3.15 (L)	<0.04	<0.04	0.43 (L)	0.75 (L)
Benzene/1,2-Dichloroethane	6.78 (L)	<0.04	<0.04	1.27 (M)	1.61 (L)
Benzene	3.63 (L)	<0.04	<0.04	0.84 (M)	0.86 (L)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	3.63 (M)	1.86 (H)	3.96 (M)	2.99 (L)	1.93 (M)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	11.28 (H)	9.59 (M)	10.80 (H)	4.05 (L)	3.73 (L)
Styrene/o-Xylene	<0.02	<0.02	2.32 (M)	0.60 (L)	0.30 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

R Replicate analysis

TABLE A6. CLOH (Continued)

Sample Date Sample ID	11/13/87 0070	11/25/87 0092	12/07/87 0120	12/19/87 0154	12/31/87 0164
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	0.25 (M)	<0.04	0.67 (L)
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	0.522(L)	3.582(H)	<0.001	<0.001	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	0.28 (L)	1.34 (L)	<0.04	<0.04	0.80 (L)
Benzene/1,2-Dichloroethane	1.70 (L)	2.76 (H)	<0.04	<0.04	3.80 (M)
Benzene	1.58 (L)	1.42 (H)	<0.04	<0.04	3.00 (M)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	0.93 (H)	1.04 (M)	1.29 (H)
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	1.23 (H)	<0.02	0.94 (M)	1.14 (H)	1.42 (H)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	0.82 (M)
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	4.47 (H)	3.08 (M)	1.55 (H)	3.45 (H)	5.40 (H)
Styrene/o-Xylene	0.93 (H)	<0.02	0.40 (H)	0.52 (H)	67.90 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	0.581(M)
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level

(Continued)

TABLE A6. CLOH (Continued)

Sample Date Sample ID	01/12/88 0175D (a)	01/12/88 0176D (a)	01/24/88 0207	02/05/88 0229	02/17/88 0258
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	0.32 (H)	<0.04	0.16 (M)
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	0.087(H)	0.052(M)	0.053(M)	<0.001	0.154(L)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene	<0.04	<0.04	<0.04	<0.04	<0.04
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	0.92 (H)	0.87 (H)	0.77 (M)	0.77 (M)	0.82 (M)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	0.11 (M)	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	0.36 (M)	<0.02	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	0.48 (M)	0.75 (H)	2.19 (H)	1.50 (H)	1.11 (H)
Styrene/o-Xylene	0.08 (L)	0.12 (H)	1.84 (H)	0.46 (L)	0.31 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	0.12 (L)	0.18 (L)	1.15 (H)	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	4.68 (H)	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	1.54 (H)	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

(a) Sampled for 13 hours

D Duplicate sample

TABLE A6. CLOH (Continued)

Sample Date Sample ID	02/17/88 0258R	02/29/88 0272	03/12/88 0289	03/24/88 0316	04/17/88 0352
Compound			Concentration, ppbv		
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	0.10 (H)
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	0.178(M)	<0.001	0.135(H)	0.137(H)	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	2.15 (L)	1.48 (L)	<0.04
Benzene/1,2-Dichloroethane	<0.04	<0.04	2.40 (H)	1.61 (H)	<0.04
Benzene	<0.04	<0.04	0.25 (H)	0.13 (H)	<0.04
Trichloroethylene	0.563(L)	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	0.87 (M)	<0.02	0.82 (M)	0.72 (L)	1.35 (H)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	0.34 (M)	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	<0.02	0.19 (H)
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	0.87 (H)
m/p-Xylene	1.05 (H)	0.20 (H)	0.26 (H)	0.33 (M)	0.26 (H)
Styrene/o-Xylene	0.28 (M)	<0.02	0.09 (M)	0.12 (L)	0.24 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	0.342(L)	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	0.09 (M)
p-Dichlorobenzene	<0.09	<0.09	<0.09	0.26 (M)	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	0.50 (M)

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

R Replicate analysis

TABLE A6. CLOH (Continued)

Sample Date	04/29/88	05/11/88	05/11/88	05/23/88	05/23/88
Sample ID	0374	0394D	0395D	0414	0414R
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	0.42 (H)	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	0.138(M)
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	0.851(M)	1.146(M)	1.297 (H)	2.348(L)	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	0.92 (L)	0.99 (L)	1.12 (L)	6.02 (L)	5.95 (L)
Benzene/1,2-Dichloroethane	1.02 (H)	1.65 (H)	1.90 (H)	9.74 (H)	9.68 (H)
Benzene	0.10 (H)	0.66 (H)	0.78 (H)	3.72 (H)	3.73 (H)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	2.34 (M)	2.20 (L)	2.71 (L)	12.77 (L)	16.32 (L)
n-Octane	<0.03	<0.03	<0.03	1.98 (H)	2.96 (H)
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	0.09 (L)	<0.02	<0.02	<0.02
Tetrachloroethylene	0.29 (M)	<0.07	<0.07	5.51 (M)	7.72 (L)
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	1.00 (H)	1.40 (H)
Ethylbenzene	0.18 (H)	<0.02	<0.02	1.46 (L)	<0.02
m/p-Xylene	0.18 (H)	1.13 (L)	1.44 (L)	7.82 (M)	9.38 (M)
Styrene/o-Xylene	0.13 (M)	0.45 (L)	0.48 (L)	3.05 (H)	2.85 (M)
Bromoform	<0.001	0.007(M)	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	0.659(H)	<0.002	<0.002
m-Dichlorobenzene	<0.02	0.22 (L)	0.73 (L)	0.55 (M)	0.52 (L)
p-Dichlorobenzene	<0.09	3.84 (M)	6.40 (L)	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	0.52 (M)	0.80 (L)

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample R Replicate analysis

TABLE A6. CLOH (Continued)

Sample Date Sample ID	06/04/88 0435	06/17/88 0455	06/28/88 0476	07/10/88 0496	07/10/88 0496R
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	0.09 (H)	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	1.320(M)	1.959(H)	1.795(H)	0.857(L)	0.874(L)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	0.61 (L)	1.25 (L)	2.86 (L)	<0.04	<0.04
Benzene/1,2-Dichloroethane	1.60 (M)	1.96 (H)	6.92 (M)	<0.04	<0.04
Benzene	0.99 (M)	0.71 (H)	4.06 (M)	6.14 (H)	6.12 (H)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	3.48 (M)	4.09 (H)	4.44 (H)	5.06 (H)	5.17 (H)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	<0.02	<0.02	0.44 (H)	0.54 (H)	0.55 (H)
m/p-Xylene	2.23 (L)	2.15 (L)	2.67 (H)	3.88 (H)	3.87 (H)
Styrene/o-Xylene	0.76 (L)	0.60 (L)	0.80 (H)	0.83 (H)	0.76 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	2.97 (M)	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

R Replicate analysis

TABLE A6. CLOH (Continued)

Sample Date Sample ID	07/22/88 0523	08/11/88 0558D	08/11/88 0558R	08/11/88 0559D	08/11/88 0559R
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	0.14 (L)	<0.10	<0.10	<0.10	<0.10
Methylene chloride	6.54 (H)	4.99 (L)	4.58 (L)	3.50 (H)	4.71 (H)
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	2.905(H)	1.598(H)	1.543(H)	1.728(H)	1.652(H)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene	4.17 (H)	3.12 (H)	3.21 (H)	3.24 (H)	3.29 (H)
Trichloroethylene	3.534(H)	0.857(H)	0.836(H)	1.058(H)	1.036 (L)
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	5.76 (H)	4.78 (H)	5.16 (H)	5.01 (L)	5.12 (L)
n-Octane	0.89 (L)	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	0.28 (L)	0.58 (H)	0.56 (H)	0.56 (M)	0.66 (L)
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	0.08 (H)	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	0.48 (H)	0.47 (H)	0.52 (H)	0.46 (H)	0.50 (H)
m/p-Xylene	3.82 (H)	3.28 (H)	3.50 (H)	3.26 (H)	3.48 (H)
Styrene/o-Xylene	0.82 (H)	0.69 (H)	0.78 (H)	0.73 (H)	0.80 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(Continued)

(H) High confidence level (M) Medium confidence level (L) Low confidence level

D Duplicate sample R Replicate analysis

TABLE A6. CLOH (Continued)

Sample Date Sample ID	08/15/88 0569	08/27/88 0594	09/08/88 0616	09/20/88 0639
Compound		Concentration, ppbv		
Acetylene	<1.00	20.73 (L)	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	0.32 (M)	0.62 (H)	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	6.106(H)
1,1,1-Trichloroethane	0.928(H)	0.791(H)	1.635(H)	1.625(M)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04
Benzene	1.49 (H)	2.30 (H)	5.76 (H)	2.17 (H)
Trichloroethylene	0.993(H)	0.424(M)	1.272(H)	2.584(H)
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04
Toluene	3.12 (H)	3.49 (H)	5.78 (H)	2.73 (M)
n-Octane	0.14 (M)	0.26 (L)	0.30 (M)	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	0.29 (H)	0.39 (M)	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	0.09 (L)	<0.02	0.14 (M)	0.12 (L)
Ethylbenzene	0.31 (H)	0.45 (H)	0.56 (H)	0.29 (H)
m/p-Xylene	2.04 (H)	3.06 (H)	4.47 (H)	2.13 (H)
Styrene/o-Xylene	0.53 (H)	0.71 (H)	1.04 (H)	0.55 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	0.308(M)	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	0.58 (L)	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level

TABLE A7. MULTIPLE DETECTOR SPECIATED UATMP DATA SUMMARY FOR DBMI

Sample Date	10/06/87	10/18/87	10/30/87	11/11/87	11/24/87
Sample ID	0002	0010	0042	0065	0091
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	<0.001	<0.001	<0.001	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	1.85 (L)	<0.04	<0.04	1.31 (L)
Benzene/1,2-Dichloroethane	<0.04	3.73 (L)	<0.04	<0.04	2.73 (H)
Benzene	<0.04	1.88 (L)	<0.04	<0.04	1.42 (H)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	<0.02	1.51 (M)	1.56 (H)	0.69 (H)	1.19 (H)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	1.58 (H)	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	8.57 (M)	8.39 (M)	9.37 (H)	4.60 (H)	1.88 (H)
Styrene/o-Xylene	<0.02	<0.02	<0.02	0.91 (M)	0.23 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

TABLE A7. DBMI (Continued)

Sample Date Sample ID	12/07/87 0116	12/18/87 0139	12/29/87 0150	01/11/88 0181D	01/11/88 0182D
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	0.32 (M)	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	<0.001	<0.001	<0.001	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	<0.04	1.80 (L)	<0.04
Benzene/1,2-Dichloroethane	8.21 (H)	<0.04	<0.04	2.15 (L)	<0.04
Benzene	9.17 (H)	<0.04	<0.04	0.35 (L)	0.36 (L)
Trichloroethylene	<0.004	<0.004	<0.004	0.770(L)	<0.004
1,2-Dichloropropane	<0.04	0.87 (M)	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	2.14 (H)	0.62 (H)	1.05 (H)	0.56 (H)	0.82 (H)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	0.76 (H)	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	0.22 (H)	<0.02
Tetrachloroethylene	<0.07	<0.07	0.23 (H)	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	2.36 (H)	0.08 (M)	<0.02	<0.02	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	9.32 (H)	2.71 (H)	3.37 (H)	0.86 (H)	1.61 (M)
Styrene/o-Xylene	4.87 (M)	0.68 (H)	<0.02	0.12 (H)	<0.02
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	0.12 (M)	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample

TABLE A7. DBMI (Continued)

Sample Date	01/22/88	02/04/88	02/16/88	02/16/88	02/27/88
Sample ID	0196	0222	0239	0239R	0275D
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	0.59 (L)	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	0.050(M)	0.010(H)	0.104(H)	<0.001	0.110(L)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	0.93 (L)
Benzene/1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	1.02 (H)
Benzene	<0.04	0.24 (L)	<0.04	<0.04	0.09 (H)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	0.478(H)
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	0.72 (H)	1.44 (M)	0.51 (M)	0.51 (M)	0.56 (L)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	2.30 (H)	3.82 (H)	1.64 (H)	1.66 (H)	<0.04
Styrene/o-Xylene	0.49 (M)	0.89 (M)	0.28 (H)	0.28 (H)	<0.02
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	0.59 (M)	0.66 (L)	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample R Replicate analysis

TABLE A7. DBMI (Continued)

Sample Date Sample ID	02/27/88 0276D	03/11/88 0293	03/22/88 0302	04/04/88 0327	04/18/88 0350
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	0.060(M)	0.075(M)	0.044(M)	0.231(L)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	0.92 (L)	<0.04	<0.04	0.81 (L)	<0.04
Benzene/1,2-Dichloroethane	1.01 (H)	<0.04	<0.04	0.89 (H)	<0.04
Benzene	0.09 (H)	<0.04	<0.04	0.08 (H)	<0.04
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	0.62 (L)	1.23 (H)	0.72 (M)	1.22 (H)	0.61 (M)
n-Octane	0.68 (H)	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	0.13 (H)	0.15 (M)
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	0.80 (M)
m/p-Xylene	0.16 (L)	0.27 (H)	0.28 (L)	0.10 (H)	0.43 (H)
Styrene/o-Xylene	<0.02	<0.02	<0.02	<0.02	0.14 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample R Replicate analysis

TABLE A7. DBMI (Continued)

Sample Date Sample ID	04/28/88 0365	04/28/88 0365R	05/10/88 0388D	05/10/88 0389D	05/21/88 0409
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	<0.001	<0.001	<0.001	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	1.16 (L)	1.15 (L)	5.60 (L)	3.65 (L)	3.19 (L)
Benzene/1,2-Dichloroethane	1.25 (H)	1.24 (H)	5.84 (L)	3.88 (H)	5.30 (H)
Benzene	0.09 (H)	0.09 (H)	0.24 (L)	0.23 (H)	2.11 (H)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	0.57 (M)	0.51 (M)	0.72 (L)	1.06 (H)	5.25 (H)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	<0.02	0.61 (M)
Ethylbenzene	0.18 (M)	0.30 (L)	0.97 (H)	1.10 (L)	1.31 (H)
m/p-Xylene	0.22 (L)	0.18 (L)	0.34 (L)	0.28 (L)	4.77 (H)
Styrene/o-Xylene	<0.02	<0.02	0.36 (L)	0.24 (L)	1.38 (L)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	0.28 (M)	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	0.41 (L)

(H) High confidence level　(M) Medium confidence level　(L) Low confidence level　(Continued)

D Duplicate sample　R Replicate analysis

TABLE A7. DBMI (Continued)

Sample Date Sample ID	06/03/88 0432	06/16/88 0450	06/26/88 0473	07/11/88 0493	07/21/88 0519
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	7.14 (L)	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	0.877(M)	<0.001	<0.001	0.555(L)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	0.180(L)
1,2-Dichloroethane	0.22 (L)	0.96 (L)	0.33 (L)	<0.04	<0.04
Benzene/1,2-Dichloroethane	0.71 (M)	1.95 (H)	0.56 (H)	<0.04	<0.04
Benzene	0.49 (M)	0.99 (H)	0.23 (H)	0.96 (L)	2.00 (H)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	4.15 (H)	2.50 (H)	0.71 (H)	2.28 (H)	3.30 (H)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	0.33 (M)	0.49 (H)
m/p-Xylene	<0.04	2.68 (L)	0.54 (H)	2.19 (H)	3.35 (H)
Styrene/o-Xylene	<0.02	0.65 (L)	0.18 (H)	0.42 (H)	0.73 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	0.71 (L)	<0.02	0.16 (H)	<0.02	<0.02
p-Dichlorobenzene	<0.09	2.60 (M)	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

TABLE A7. DBMI (Continued)

Sample Date Sample ID	08/01/88 0537	08/15/88 0561D	08/15/88 0561R	08/15/88 0562D	08/15/88 0562R
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	0.45 (H)	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	0.12 (H)	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	0.34 (H)	0.47 (H)	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	0.628(H)	0.624(H)	0.637(H)	0.695(M)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene	0.83 (H)	1.57 (H)	1.48 (H)	1.44 (H)	1.75 (H)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	1.43 (H)	2.56 (H)	2.70 (L)	2.53 (L)	2.85 (L)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	0.10 (H)	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	0.20 (H)	0.32 (H)	0.35 (H)	0.33 (H)	0.39 (H)
m/p-Xylene	1.79 (H)	2.04 (H)	2.20 (H)	2.09 (H)	2.22 (H)
Styrene/o-Xylene	0.30 (H)	0.53 (H)	0.59 (H)	0.49 (M)	0.57 (L)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample R Replicate analysis

TABLE A7. DBMI (Continued)

Sample Date	08/26/88	08/26/88	09/08/88
Sample ID	0592D	0593D	0611
Compound	Concentration, ppbv		
Acetylene	<1.00	<1.00	<1.00
Propylene	5.36 (M)	4.38 (L)	6.88 (L)
Chloromethane	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20
1,3-Butadiene	0.12 (L)	0.15 (M)	<0.10
Bromomethane	<0.20	<0.20	<0.20
Chloroethane	0.91 (L)	0.35 (L)	0.34 (L)
Methylene chloride	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04
1,1-Dichloroethane	0.05 (L)	0.09 (L)	<0.04
Chloroprene	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003
Chloroform	1.720(L)	1.864(M)	<0.006
1,1,1-Trichloroethane	0.620(L)	0.658(H)	0.751(M)
Carbon tetrachloride	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	<0.04	<0.04	<0.04
Benzene	0.93 (L)	0.75 (H)	1.33 (H)
Trichloroethylene	<0.004	<0.004	<0.004
1,2-Dichloropropane	0.46 (H)	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04
Toluene	1.75 (H)	1.87 (H)	5.61 (H)
n-Octane	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	0.07 (M)	0.30 (L)
Dibromochloromethane	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02
Ethylbenzene	0.49 (H)	0.52 (M)	1.42 (H)
m/p-Xylene	2.68 (H)	2.96 (H)	10.01 (H)
Styrene/o-Xylene	0.52 (H)	0.57 (H)	1.15 (H)
Bromoform	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	0.110(H)	0.321(H)	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level

D Duplicate sample R Replicate analysis

TABLE A8. MULTIPLE DETECTOR SPECIATED UATMP DATA SUMMARY FOR DLTX

Sample Date Sample ID	09/30/87 0001	10/12/87 0023	10/24/87 0054	10/24/87 0054R	11/05/87 0050
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	<0.001	<0.001	<0.001	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene	<0.04	<0.04	<0.04	<0.04	<0.04
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	1.47 (H)	1.62 (M)	1.16 (L)	1.07 (M)	2.00 (M)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	4.76 (H)	6.54 (L)	3.76 (M)	4.85 (L)	9.37 (H)
Styrene/o-Xylene	1.37 (M)	<0.02	<0.02	<0.02	<0.02
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

R Replicate sample

TABLE A8. DLTX (Continued)

Sample Date Sample ID	11/17/87 0078	11/29/87 0095	12/11/87 0127	12/23/87 0143	01/06/88 0169D
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	9.06 (L)
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	1.90 (H)
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	<0.001	<0.001	<0.001	0.102(H)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	0.93 (L)	<0.04	0.68 (L)	<0.04	<0.04
Benzene/1,2-Dichloroethane	1.78 (H)	<0.04	2.07 (H)	<0.04	<0.04
Benzene	0.85 (H)	<0.04	1.39 (H)	<0.04	<0.04
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	0.93 (M)	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	1.94 (H)	2.66 (H)	<0.02	<0.02	0.41 (H)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	0.44 (H)	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	0.28 (H)	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	0.81 (M)	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	2.98 (H)	3.53 (H)	5.26 (H)	<0.04	1.02 (H)
Styrene/o-Xylene	0.64 (M)	0.96 (H)	0.88 (H)	<0.02	0.21 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	0.06 (L)
p-Dichlorobenzene	<0.09	1.13 (M)	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample

TABLE A8. DLTX (Continued)

Sample Date Sample ID	01/06/88 0170D	01/16/88 0197	01/28/88 0219	02/09/88 0243	02/21/88 0253
Compound			Concentration, ppbv		
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	7.92 (M)	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	0.25 (M)	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	<0.001	0.099(H)	0.061(H)	0.026(L)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	1.08 (L)	1.24 (L)	1.75 (L)	<0.04
Benzene/1,2-Dichloroethane	<0.04	1.19 (H)	1.30 (H)	1.86 (M)	<0.04
Benzene	<0.04	0.11 (H)	0.06 (H)	0.11 (M)	<0.04
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	1.01 (M)	<0.04	<0.04
Toluene	0.41 (H)	<0.02	0.67 (H)	1.33 (L)	0.97 (H)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	1.00 (M)	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	0.07 (L)	<0.07	<0.07	0.31 (M)	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	1.11 (H)	2.60 (H)	1.50 (H)	3.66 (H)	1.72 (L)
Styrene/o-Xylene	0.28 (H)	0.92 (H)	<0.02	0.89 (M)	<0.02
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	3.49 (H)	<0.09	<0.09	<0.09
o-Dichlorobenzene	0.15 (M)	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample

TABLE A8. DLTX (Continued)

Sample Date Sample ID	03/05/88 0261	03/16/88 0283	03/28/88 0330	04/09/88 0339	04/21/88 0354D
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	0.094(M)	<0.001	0.103(H)	<0.001	0.337(H)
Carbon tetrachloride	<0.001	<0.001	0.227(L)	<0.001	<0.001
1,2-Dichloroethane	1.12 (L)	1.15 (L)	0.45 (L)	1.19 (L)	0.93 (L)
Benzene/1,2-Dichloroethane	1.23 (H)	1.26 (H)	0.50 (H)	1.33 (H)	1.00 (H)
Benzene	0.11 (H)	0.11 (H)	0.05 (H)	0.14 (H)	0.07 (H)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	0.67 (L)	0.62 (L)	0.92 (H)	1.82 (H)	0.84 (H)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	0.33 (L)	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	<0.04	<0.04	0.09 (H)	0.27 (L)	0.16 (L)
Styrene/o-Xylene	<0.02	0.09 (M)	<0.02	0.15 (L)	0.28 (M)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	0.04 (L)	<0.02	0.14 (L)
p-Dichlorobenzene	<0.09	<0.09	0.86 (H)	<0.09	2.58 (L)
o-Dichlorobenzene	0.24 (H)	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample

TABLE A8. DLTX (Continued)

Sample Date	04/21/88	05/05/88	05/15/88	05/27/88	05/27/88
Sample ID	0355D	0383	0396	0417	0417R
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	0.10 (H)
Bromochloromethane	<0.003	0.142(M)	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	0.289(H)	<0.001	11.316(H)	0.856(M)	0.799(L)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	0.87 (L)	0.70 (L)	1.79 (L)	1.69 (L)	1.51 (L)
Benzene/1,2-Dichloroethane	0.94 (H)	0.76 (H)	5.86 (M)	2.82 (H)	2.90 (H)
Benzene	0.07 (H)	0.06 (H)	4.07 (M)	1.13 (H)	1.39 (H)
Trichloroethylene	<0.004	<0.004	1.450(M)	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	0.87 (H)	0.87 (M)	92.45 (H)	3.70 (L)	3.82 (H)
n-Octane	<0.03	<0.03	1.97 (M)	0.50 (L)	0.53 (H)
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	0.54 (L)	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	0.61 (M)	<0.02	<0.02
Ethylbenzene	0.36 (M)	<0.02	1.41 (M)	<0.02	<0.02
m/p-Xylene	0.14 (L)	<0.04	6.95 (H)	2.78 (L)	2.97 (L)
Styrene/o-Xylene	0.12 (M)	0.05 (L)	3.39 (H)	0.98 (L)	1.21 (M)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	0.346(H)	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	0.30 (L)	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	0.71 (L)	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample R Replicate analysis

TABLE A8. DLTX (Continued)

Sample Date Sample ID	06/08/88 0445	06/20/88 0461	07/02/88 0485	07/14/88 0507	07/14/88 0507R
Compound			Concentration, ppbv		
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	1.08 (H)	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	0.793(H)	0.740(H)	0.752(L)	<0.001	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	0.54 (L)	0.61 (L)	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	1.18 (H)	1.24 (H)	<0.04	<0.04	<0.04
Benzene	0.64 (H)	0.63 (H)	0.87 (L)	0.37 (H)	0.37 (H)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	0.16 (M)	<0.04	<0.04	<0.04
Toluene	5.19 (L)	1.83 (L)	2.72 (L)	1.08 (H)	1.04 (L)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	<0.02	0.23 (H)	0.31 (H)	<0.02	<0.02
m/p-Xylene	1.78 (L)	1.50 (H)	1.92 (H)	0.71 (H)	0.61 (M)
Styrene/o-Xylene	0.74 (H)	0.56 (M)	0.44 (H)	0.15 (L)	0.12 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	0.217(H)	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	0.30 (H)	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

R Replicate analysis

TABLE A8. DLTX (Continued)

Sample Date Sample ID	07/27/88 0529	08/07/88 0555D	08/07/88 0556D	08/20/88 0580	08/31/88 0601
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	3.93 (L)
Chloromethane	<0.20	<0.20	<0.20	<0.20	0.29 (L)
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	0.30 (M)	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	1.51 (L)
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	0.03 (L)
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	0.334(L)	0.353 (H)	1.118(H)	0.510(L)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene	0.46 (M)	0.54 (H)	0.68 (M)	2.06 (H)	1.01 (L)
Trichloroethylene	<0.004	<0.004	<0.004	0.356(L)	0.346(M)
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	<0.02	1.04 (L)	1.05 (L)	3.97 (L)	1.40 (H)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	0.14 (M)	0.25 (L)
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	0.16 (H)	0.11 (M)	0.12 (H)	0.03 (H)	0.19 (H)
m/p-Xylene	0.95 (H)	0.70 (H)	0.81 (H)	0.78 (H)	1.10 (H)
Styrene/o-Xylene	0.21 (H)	0.11 (L)	0.19 (H)	0.60 (H)	0.29 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample

TABLE A8. DLTX (Continued)

Sample Date Sample ID	09/12/88 0625	09/24/88 0653
Compound	Concentration, ppbv	
Acetylene	<1.00	<1.00
Propylene	4.37 (H)	<0.10
Chloromethane	<0.20	<0.20
Vinyl chloride	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10
Bromomethane	<0.20	<0.20
Chloroethane	<0.10	<0.10
Methylene chloride	<0.11	<0.11
trans-1,2-Dichloroethylene	0.78 (L)	<0.04
1,1-Dichloroethane	<0.04	0.09 (L)
Chloroprene	0.45 (H)	<0.06
Bromochloromethane	<0.003	<0.003
Chloroform	<0.006	<0.006
1,1,1-Trichloroethane	0.325 (L)	0.759(H)
Carbon tetrachloride	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04
Benzene/1,2-Dichloroethane	<0.04	<0.04
Benzene	0.72 (H)	0.72 (H)
Trichloroethylene	<0.004	0.480(H)
1,2-Dichloropropane	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04
Toluene	1.51 (M)	1.76 (M)
n-Octane	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03
trans-1,3-Dichloropropylene	0.21 (L)	<0.04
1,1,2-Trichloroethane	<0.02	0.11 (L)
Tetrachloroethylene	<0.07	0.14 (H)
Dibromochloromethane	<0.001	<0.001
Chlorobenzene	<0.02	<0.02
Ethylbenzene	0.18 (H)	<0.02
m/p-Xylene	1.12 (H)	1.21 (H)
Styrene/o-Xylene	0.31 (M)	0.31 (H)
Bromoform	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level

TABLE A9. MULTIPLE DETECTOR SPECIATED UATMP DATA SUMMARY FOR DTMI

Sample Date Sample ID	10/06/87 0004	10/18/87 0011	10/30/87 0035	10/30/87 0035R	12/04/87 0117
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	0.39 (M)	0.77 (L)	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	<0.001	<0.001	<0.001	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	2.96
Benzene/1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	5.87 (M)
Benzene	<0.04	<0.04	<0.04	<0.04	2.91 (M)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	<0.02	<0.02	3.13 (L)	3.07 (L)	<0.02
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	1.69 (H)	1.44 (H)	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	12.76 (M)
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	13.57 (M)	9.86 (M)	11.98 (H)	11.21 (H)	9.76 (H)
Styrene/o-Xylene	<0.02	<0.02	<0.02	<0.02	<0.02
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

R Replicate analysis

TABLE A9. DTMI (Continued)

Sample Date Sample ID	12/17/87 0140	12/29/87 0157	01/10/88 0178D	01/10/88 0179D	01/22/88 0198
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	3.59 (H)	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	<0.001	<0.001	0.043(H)	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	1.78 (L)	0.42 (L)	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	2.93 (M)	1.22 (H)	<0.04	<0.04	<0.04
Benzene	1.15 (M)	0.80 (M)	<0.04	<0.04	<0.04
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	0.97 (H)	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	2.05 (H)	1.39 (H)	0.62 (H)	0.62 (H)	1.28 (H)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	4.56 (H)	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	0.59 (H)	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	1.64 (M)	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	0.69 (M)	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	1.81 (M)	0.28 (M)	<0.02	<0.02	<0.001
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	5.03 (H)	5.07 (H)	0.75 (H)	0.47 (H)	<0.02
Styrene/o-Xylene	<0.02	1.09 (H)	0.15 (H)	0.12 (H)	4.54 (L)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.02
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.001
m-Dichlorobenzene	<0.02	0.41 (M)	<0.02	<0.02	<0.002
p-Dichlorobenzene	<0.09	1.72 (M)	<0.09	<0.09	<0.02
o-Dichlorobenzene	<0.02	<0.02	0.08 (M)	<0.02	<0.09

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample

TABLE A9. DTMI (Continued)

Sample Date Sample ID	02/03/88 0215	02/15/88 0238	02/27/88 0274	03/10/88 0294	03/10/88 0294R
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	0.091(H)	0.056(H)	0.064(L)	0.056(H)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene	<0.04	<0.04	<0.04	<0.04	<0.04
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	1.74 (M)	0.97 (M)	1.33 (M)	1.13 (M)	1.02 (L)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	0.08 (M)	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	<0.02	0.06 (L)
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	4.54 (H)	3.38 (H)	1.05 (H)	0.61 (H)	0.64 (H)
Styrene/o-Xylene	1.04 (H)	0.92 (M)	0.28 (H)	0.18 (H)	0.21 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	0.03 (M)	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

R Replicate analysis

TABLE A9. DTMI (Continued)

Sample Date Sample ID	03/22/88 0304	04/03/88 0328	04/15/88 0351	04/27/88 0366	05/09/88 0384
Compound			Concentration, ppbv		
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	<0.001	<0.001	0.842(H)	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	<0.04	0.81 (L)	3.61 (L)
Benzene/1,2-Dichloroethane	<0.04	<0.04	<0.04	0.92 (M)	3.71 (L)
Benzene	<0.04	<0.04	<0.04	0.11 (M)	0.10 (L)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	0.82 (H)	1.94 (H)	1.26 (M)	0.55 (L)	1.26 (M)
n-Octane	0.14 (H)	1.01 (M)	<0.03	<0.03	0.89 (H)
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	0.07 (L)	0.27 (H)	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	0.28 (L)	<0.02	<0.02	0.15 (H)
Ethylbenzene	<0.02	<0.02	0.48 (H)	<0.02	1.06 (H)
m/p-Xylene	0.26 (M)	0.66 (L)	0.44 (H)	0.27 (H)	0.45 (H)
Styrene/o-Xylene	<0.02	0.52 (H)	0.23 (H)	0.19 (M)	0.21 (L)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	0.06 (L)
p-Dichlorobenzene	<0.09	1.08 (M)	<0.09	<0.09	0.61 (M)
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

TABLE A9. DTMI (Continued)

Sample Date Sample ID	05/21/88 0412D	05/21/88 0413D	06/02/88 0426	06/02/88 0426R	06/15/88 0449
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	0.62 (M)	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	1.182(L)	1.206(L)	<0.001	<0.001	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	2.74 (L)	3.93 (L)	0.97 (L)	2.20 (L)	1.45 (L)
Benzene/1,2-Dichloroethane	5.76 (H)	6.91 (H)	1.99 (H)	3.15 (M)	3.30 (M)
Benzene	3.02 (H)	2.98 (H)	1.02 (H)	0.95 (M)	1.85 (M)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	5.40 (M)	5.84 (H)	5.75 (H)	3.46 (M)	5.48 (M)
n-Octane	<0.03	0.77 (L)	<0.03	<0.03	0.84 (H)
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	0.54 (L)	<0.02
Ethylbenzene	0.72 (L)	0.91 (M)	<0.02	<0.02	<0.02
m/p-Xylene	5.18 (M)	5.34 (M)	2.74 (L)	4.34 (L)	5.80 (M)
Styrene/o-Xylene	1.37 (L)	1.46 (L)	1.03 (L)	1.52 (M)	1.81 (L)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	0.23 (L)	<0.02	0.66 (L)	1.01 (M)	0.33 (H)
p-Dichlorobenzene	<0.09	<0.09	7.04 (L)	9.68 (L)	2.95 (H)
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	1.62 (L)

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample R Replicate analysis

TABLE A9. DTMI (Continued)

Sample Date Sample ID	06/26/88 0474	07/08/88 0492	07/20/88 0518	08/08/88 0550	08/15/88 0565
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	7.42 (H)	6.21 (H)	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	10.34 (L)	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	0.450(H)	<0.001	0.585(L)	<0.001	0.549(M)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene	<0.04	2.84 (M)	2.71 (H)	1.87 (H)	1.61 (H)
Trichloroethylene	<0.004	0.700(H)	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	1.74 (H)	21.10 (H)	4.78 (H)	3.17 (H)	3.33 (H)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	0.13 (L)
Tetrachloroethylene	<0.07	1.03 (M)	1.22 (M)	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	1.42 (H)	<0.02	<0.02	<0.02
Ethylbenzene	0.19 (H)	1.93 (H)	0.74 (H)	0.44 (H)	0.45 (H)
m/p-Xylene	1.34 (H)	10.17 (H)	5.54 (H)	3.25 (H)	2.94 (H)
Styrene/o-Xylene	0.29 (M)	3.65 (H)	1.34 (H)	0.78 (H)	0.71 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

TABLE A9. DTMI (Continued)

Sample Date Sample ID	08/25/88 0590	09/18/88 0614D	09/18/88 0614R	09/18/88 0615D	09/18/88 0615R
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	3.92 (H)	3.71 (L)	4.03 (H)	3.60 (M)
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	0.27 (M)	0.43 (M)	<0.10	0.40 (L)	0.34 (M)
Bromomethane	<0.20	<0.20	<0.20	<0.[illegible]	<0.20
Chloroethane	1.90 (L)	<0.10	<0.10	<0.[illegible]	<0.10
Methylene chloride	15.96 (L)	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	0.17 (H)	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	2.009(M)	0.518(L)	0.491(L)	0.479(M)	0.641(L)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene	2.51 (H)	2.06 (H)	1.80 (H)	2.00 (H)	2.04 (H)
Trichloroethylene	0.239(M)	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	7.66 (H)	4.84 (H)	4.31 (H)	5.05 (H)	4.40 (H)
n-Octane	0.20 (L)	0.16 (L)	0.16 (L)	0.19 (M)	0.20 (L)
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	0.28 (M)
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	0.25 (L)	0.11 (L)	0.08 (L)	0.11 (L)	0.12 (L)
Ethylbenzene	0.76 (H)	0.54 (H)	0.53 (H)	0.51 (H)	0.51 (H)
m/p-Xylene	4.45 (H)	3.37 (H)	3.23 (H)	3.34 (H)	3.21 (H)
Styrene/o-Xylene	1.16 (H)	1.02 (H)	0.92 (H)	0.97 (H)	0.97 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level

D Duplicate sample R Replicate analysis

TABLE A10. MULTIPLE DETECTOR SPECIATED UATMP DATA SUMMARY FOR H1TX

Sample Date Sample ID	10/06/87 0031	10/20/87 0057	11/01/87 0053	11/01/87 0053R	11/13/87 0071
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	0.24 (H)
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	<0.001	<0.001	<0.001	26.932(M)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	2.01 (L)	1.38 (L)	0.64 (L)	0.99 (L)	0.56 (L)
Benzene/1,2-Dichloroethane	3.66 (L)	3.79 (M)	2.58 (M)	3.04 (M)	5.85 (H)
Benzene	1.65 (L)	2.41 (M)	1.94 (M)	2.05 (M)	5.29 (H)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	4.37 (M)	2.54 (H)	1.84 (M)	1.76 (L)	112.53 (H)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	1.64 (H)	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	13.77 (H)	9.94 (M)	5.82 (M)	5.21 (M)	43.94 (H)
Styrene/o-Xylene	3.37 (H)	0.99 (L)	<0.02	<0.02	17.80 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	4.42 (M)
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	2.00 (H)

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

R Replicate analysis

TABLE A10. H1TX (Continued)

Sample Date	11/25/87	12/08/87	12/21/87	01/13/88	01/25/88
Sample ID	0093	0118	0144	0184	0208D
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	0.20 (M)	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	0.099(H)
Chloroform	<0.006	<0.006	<0.006	<0.006	0.548(M)
1,1,1-Trichloroethane	<0.001	<0.001	<0.001	<0.001	0.262(H)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	0.84 (L)	0.40 (L)	0.98 (L)	3.05 (L)	<0.04
Benzene/1,2-Dichloroethane	1.95 (H)	1.34 (M)	2.38 (H)	3.40 (H)	<0.04
Benzene	1.11 (H)	0.94 (M)	1.40 (H)	0.35 (L)	<0.04
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	2.47 (M)	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	1.97 (M)	1.84 (H)	2.21 (M)	3.84 (L)	0.92 (M)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	0.46 (H)	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	0.17 (H)	0.76 (H)	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	2.67 (M)	2.22 (H)	5.85 (M)	3.08 (H)	2.36 (H)
Styrene/o-Xylene	<0.02	0.57 (M)	1.03 (M)	2.24 (M)	0.70 (M)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	0.30 (M)	<0.02	0.21 (L)	<0.02
p-Dichlorobenzene	<0.09	0.60 (M)	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample

TABLE A10. H1TX (Continued)

Sample Date	01/25/88	02/05/88	02/17/88	02/17/88	02/29/88
Sample ID	0209D	0228	0256	0256R	0269
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	0.193(L)	<0.001	<0.001	<0.001	0.290(H)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	1.75 (L)	<0.04	1.70 (L)	2.51 (L)	1.66 (L)
Benzene/1,2-Dichloroethane	2.05 (L)	<0.04	2.30 (H)	2.60 (H)	1.88 (M)
Benzene	0.30 (L)	<0.04	0.70 (H)	0.09 (H)	0.22 (M)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	1.02 (L)	0.62 (M)	0.46 (H)	1.13 (M)	2.05 (L)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	0.11 (L)	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	0.05	<0.02	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	2.30 (H)	1.33 (H)	2.00 (H)	1.97 (H)	0.55 (L)
Styrene/o-Xylene	0.64 (H)	0.31 (H)	0.61 (H)	0.67 (H)	0.49 (M)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	0.10 (M)	0.02 (L)	0.14 (L)
p-Dichlorobenzene	<0.09	<0.09	2.44 (H)	2.24 (H)	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	0.09 (M)

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample R Replicate analysis

TABLE A10. H1TX (Continued)

Sample Date Sample ID	03/12/88 0295D	03/12/88 0296D	03/24/88 0315	04/05/88 0335	04/17/88 0347
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	0.168(H)	0.17 (H)	0.27 (L)	<0.001	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	1.12 (L)	1.19 (L)	1.02 (L)	3.94 (L)	1.42 (L)
Benzene/1,2-Dichloroethane	1.26 (M)	1.32 (H)	1.21 (L)	4.39 (M)	1.58 (H)
Benzene	0.14 (M)	0.13 (H)	0.19 (L)	0.45 (M)	0.16 (H
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	1.08 (M)	1.79 (H)	0.56 (L)	1.50 (H)	0.82 (H)
n-Octane	<0.03	<0.03	<0.03	1.22 (M)	0.84 (M)
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	0.22 (H)	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	1.12 (H)
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	0.22 (L)	<0.02	0.34 (M)	0.26 (H)
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	0.59 (H)
m/p-Xylene	0.36 (M)	0.50 (M)	0.28 (H)	0.52 (M)	0.20 (H)
Styrene/o-Xylene	0.24 (H)	0.28 (M)	<0.02	0.35 (H)	0.20 (M)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	0.08 (M)	0.31 (M)	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	0.40 (H)	0.26 (L)	<0.09	1.48 (L)
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	0.27 (L)

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample

TABLE A10. H1TX (Continued)

Sample Date Sample ID	04/29/88 0376	05/09/88 0386D	05/09/88 0387D	05/21/88 0406	05/21/88 0406R
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	<0.001	<0.001	<0.001	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	1.59 (L)	3.49 (L)	2.97 (L)	1.38 (L)	<0.04
Benzene/1,2-Dichloroethane	1.76 (H)	3.64 (L)	3.14 (M)	3.22 (H)	<0.04
Benzene	0.17 (H)	0.15 (L)	0.17 (M)	1.84 (H)	<0.04
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	1.44 (H)	2.40 (H)	2.68 (M)	2.86 (H)	5.74 (L)
n-Octane	<0.03	1.65 (H)	1.07 (H)	<0.03	2.10 (H)
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	0.74 (L)	0.99 (M)
Ethylbenzene	0.29 (L)	1.30 (H)	1.08 (M)	2.01 (L)	1.66 (M)
m/p-Xylene	0.25 (H)	0.73 (M)	0.66 (H)	2.32 (L)	6.03 (H)
Styrene/o-Xylene	0.12 (M)	0.45 (L)	0.37 (L)	0.92 (L)	0.27 (L)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample R Replicate analysis

TABLE A10. H1TX (Continued)

Sample Date Sample ID	06/02/88 0424	06/14/88 0448	06/26/88 0469	07/08/88 0489	07/08/88 0489R
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	4.20 (M)	4.26 (M)
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	<0.001	<0.001	0.288(L)	0.290(L)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	1.62 (L)	3.49 (L)	2.88 (L)	<0.04	<0.04
Benzene/1,2-Dichloroethane	3.56 (H)	6.44 (H)	4.42 (L)	<0.04	<0.04
Benzene	1.94 (H)	2.95 (H)	1.54 (L)	1.15 (H)	1.15 (M)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	7.07 (H)	4.87 (M)	2.55 (H)	1.84 (M)	1.90 (M)
n-Octane	1.07 (M)	<0.03	0.23 (H)	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	0.38 (H)	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	0.55 (L)	0.48 (H)	<0.02	<0.02	<0.02
Ethylbenzene	<0.02	0.87 (H)	0.42 (H)	0.26 (H)	0.27 (H)
m/p-Xylene	4.34 (H)	2.82 (H)	2.40 (H)	1.19 (H)	1.21 (H)
Styrene/o-Xylene	1.73 (H)	1.18 (H)	0.67 (H)	0.41 (L)	0.49 (M)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	0.26 (H)	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	3.33 (L)	3.98 (H)	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

R Replicate analysis

TABLE A10. H1TX (Continued)

Sample Date Sample ID	07/14/88 0504	07/20/88 0512	08/01/88 0536	08/13/88 0563D	08/13/88 0564D
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	1.76 (H)	1.47 (H)	0.48 (H)	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	1.75 (H)	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	0.735(H)	<0.001	0.297(L)	<0.001	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene	0.75 (M)	3.16 (H)	1.95 (H)	2.40 (H)	2.40 (H)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	1.69 (H)	5.69 (H)	3.82 (M)	5.30 (H)	5.32 (H)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	0.42 (H)	0.22 (L)
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	0.06 (M)	0.08 (L)
Ethylbenzene	0.20 (H)	0.77 (H)	0.42 (H)	0.60 (H)	0.65 (H)
m/p-Xylene	1.26 (H)	4.77 (H)	2.79 (H)	3.79 (H)	3.81 (H)
Styrene/o-Xylene	0.23 (M)	1.43 (H)	0.75 (H)	0.78 (H)	0.76 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample

TABLE A10. H1TX (Continued)

Sample Date Sample ID	08/25/88 0585	09/06/88 0608	09/20/88 0644	09/30/88 0655
Compound	Concentration, ppbv			
Acetylene	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	3.62 (L)	<0.20
1,3-Butadiene	<0.10	1.21 (M)	0.61 (M)	1.12 (L)
Bromomethane	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	3.12 (L)	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	8.92 (L)
Bromochloromethane	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	0.370(L)	7.227(M)	0.179(M)	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04
Benzene	2.43 (H)	2.45 (H)	3.04 (H)	4.50 (M)
Trichloroethylene	<0.004	1.451(H)	<0.004	<0.004
1,2-Dichloropropane	<0.04	1.29 (H)	1.02 (M)	1.22 (M)
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04
Toluene	3.04 (H)	12.67 (H)	3.17 (M)	7.47 (H)
n-Octane	0.15 (L)	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	0.71 (H)	<0.02	0.12 (L)	<0.02
Tetrachloroethylene	<0.07	0.84 (M)	0.42 (L)	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	0.61 (M)	0.16 (L)	<0.02
Ethylbenzene	0.58 (H)	3.15 (M)	0.52 (M)	0.98 (H)
m/p-Xylene	3.83 (H)	5.46 (H)	4.15 (H)	6.90 (H)
Styrene/o-Xylene	0.79 (H)	5.21 (M)	1.27 (H)	1.57 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	0.06 (H)
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level

TABLE A11. MULTIPLE DETECTOR SPECIATED UATMP DATA SUMMARY FOR HAIN

Sample Date Sample ID	09/24/87 0012	10/06/87 0017	10/18/87 0021	10/30/87 0039	10/30/87 0039R
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	<0.001	<0.001	<0.001	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene	<0.04	<0.04	<0.04	<0.04	<0.04
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	3.39 (H)	<0.02	1.39 (M)	2.24 (L)	2.48 (H)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	4.40 (H)	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	1.16 (M)	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	12.24 (H)	<0.04	3.92 (H)	5.39 (H)	5.68 (H)
Styrene/o-Xylene	3.25 (M)	<0.02	<0.02	1.31 (M)	1.57 (L)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

R Replicate analysis

TABLE A11. HAIN (Continued)

Sample Date	11/12/87	11/23/87	12/07/87	12/07/87	12/17/87
Sample ID	0066	0086	0122D	0123D	0141
Compound			Concentration, ppbv		
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	<0.001	<0.001	<0.001	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	0.50 (L)	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	<0.04	1.32 (M)	<0.04	<0.04	<0.04
Benzene	<0.04	0.82 (M)	<0.04	<0.04	<0.04
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	1.21 (H)
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	1.99 (M)	0.55 (H)	2.69 (H)	4.12 (M)	1.44 (H)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	<0.04	1.51 (H)	3.35 (H)	8.41 (H)	4.58 (H)
Styrene/o-Xylene	<0.02	0.11 (H)	<0.02	<0.02	0.89 (M)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	0.76 (M)
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample

TABLE A11. HAIN (Continued)

Sample Date Sample ID	12/30/87 0158	01/11/88 0177	01/22/88 0195	02/03/88 0231	02/15/88 0252
Compound			Concentration, ppbv		
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	0.036(H)	<0.001	0.102(H)	0.037(H)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene	<0.04	<0.04	<0.04	<0.04	<0.04
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	1.83 (H)	0.36 (H)	0.41 (M)	0.77 (M)	0.62 (M)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	0.14 (H)	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	6.74 (H)	0.78 (H)	1.08 (H)	1.08 (H)	1.36 (H)
Styrene/o-Xylene	1.77 (H)	0.18 (M)	0.34 (L)	<0,02	0.37 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	0.95 (L)
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

TABLE A11. HAIN (Continued)

Sample Date Sample ID	02/27/88 0278	02/27/88 0278R	03/10/88 0300D	03/10/88 0301D	03/22/88 0308D
Compound			Concentration, ppbv		
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	0.203(L)	<0.001	<0.001	<0.001	0.068(H)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	5.54 (L)	6.33 (L)	<0.04
Benzene/1,2-Dichloroethane	<0.04	<0.04	6.60 (L)	7.40 (L)	<0.04
Benzene	<0.04	<0.04	1.06 (L)	1.07 (L)	<0.04
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	1.20 (L)	1.50 (L)	<0.04	<0.04	<0.04
Toluene	1.23 (M)	1.02 (L)	2.14 (H)	3.08 (H)	0.82 (H)
n-Octane	0.41 (M)	<0.03	0.38 (H)	0.44 (M)	0.50 (H)
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	3.10 (H)	3.40 (H)	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	0.06 (M)	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	0.26 (H)	0.24 (M)	0.89 (M)	1.08 (M)	0.33 (H)
Styrene/o-Xylene	0.12 (H)	0.09 (H)	0.37 (L)	0.52 (M)	0.15 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	0.39 (L)	0.59 (H)
o-Dichlorobenzene	<0.02	<0.02	0.07 (M)	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level

D Duplicate sample R Replicate analysis

(Continued)

TABLE A11. HAIN (Continued)

Sample Date Sample ID	02/27/88 0278	02/27/88 0278R	03/10/88 0300D	03/10/88 0301D	03/22/88 0308D
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	0.203(L)	<0.001	<0.001	<0.001	0.068(H)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	5.54 (L)	6.33 (L)	<0.04
Benzene/1,2-Dichloroethane	<0.04	<0.04	6.60 (L)	7.40 (L)	<0.04
Benzene	<0.04	<0.04	1.06 (L)	1.07 (L)	<0.04
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	1.20 (L)	1.50 (L)	<0.04	<0.04	<0.04
Toluene	1.23 (M)	1.02 (L)	2.14 (H)	3.08 (H)	0.82 (H)
n-Octane	0.41 (M)	<0.03	0.38 (H)	0.44 (M)	0.50 (H)
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	3.10 (H)	3.40 (H)	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	0.06 (M)	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	0.26 (H)	0.24 (M)	0.89 (M)	1.08 (M)	0.33 (H)
Styrene/o-Xylene	0.12 (H)	0.09 (H)	0.37 (L)	0.52 (M)	0.15 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	0.39 (L)	0.59 (H)
o-Dichlorobenzene	<0.02	<0.02	0.07 (M)	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample R Replicate analysis

TABLE A11. HAIN (Continued)

Sample Date Sample ID	03/22/88 0309D	04/03/88 0324	04/15/88 0349	04/27/88 0368	04/27/88 0368R
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	0.36 (M)
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	0.065(H)	0.240(H)	<0.001	<0.001	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	1.32 (L)	<0.04	1.86 (L)	1.53 (L)
Benzene/1,2-Dichloroethane	<0.04	1.55 (H)	<0.04	1.94 (L)	1.61 (M)
Benzene	<0.04	0.23 (H)	<0.04	0.08 (L)	0.08 (M)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	0.87 (L)	0.77 (L)	1.04 (H)	0.64 (M)	0.42 (L)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	0.12 (H)	<0.02
m/p-Xylene	0.30 (L)	<0.04	0.26 (L)	0.12 (L)	0.09 (H)
Styrene/o-Xylene	0.12 (L)	<0.02	0.14 (L)	0.11 (L)	0.08 (M)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	1.21 (M)	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample R Replicate analysis

TABLE A11. HAIN (Continued)

Sample Date Sample ID	05/09/88 0390	05/21/88 0410	06/02/88 0429	06/14/88 0446D	06/14/88 0447D
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	0.16 (M)	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	2.38 (L)	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	<0.001	1.630(H)	0.591(L)	0.580(M)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	8.54 (L)	2.21 (L)	0.56 (L)	0.70 (L)
Benzene/1,2-Dichloroethane	<0.04	16.95 (H)	5.23 (H)	1.04 (H)	1.17 (H)
Benzene	<0.04	8.41 (H)	3.02 (H)	0.48 (H)	0.47 (H)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	1.28 (L)	17.10 (H)	12.49 (H)	1.25 (M)	1.42 (H)
n-Octane	<0.03	4.13 (H)	1.44 (H)	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	0.68 (L)
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	0.24 (M)	<0.02	0.75 (H)	<0.02	<0.02
Ethylbenzene	0.97 (H)	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	0.24 (M)	11.31 (M)	5.24 (L)	<0.04	<0.04
Styrene/o-Xylene	0.15 (H)	2.44 (L)	1.78 (L)	<0.02	<0.02
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	0.32 (L)	0.81 (M)	<0.02	<0.02
p-Dichlorobenzene	<0.09	4.15 (M)	9.72 (L)	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample

TABLE A11. HAIN (Continued)

Sample Date	06/26/88	07/08/88	07/20/88	08/02/88	08/13/88
Sample ID	0475	0499	0522	0544	0571
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	1.11 (H)	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	3.94 (L)
trans-1,2-Dichloroethylene	<0.04	<0.04	1.98 (M)	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	5.06 (M)	<0.06	1.20 (H)	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	4.577(M)	2.304(L)	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	<0.001	<0.001	<0.001	0.294(L)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	4.20 (L)	<0.04	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	8.80 (H)	<0.04	<0.04	<0.04	<0.04
Benzene	4.60 (H)	4.32 (M)	5.02 (M)	0.29 (L)	0.56 (H)
Trichloroethylene	<0.004	1.807(H)	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	5.46 (H)	8.68 (H)	4.48 (H)	1.20 (M)	0.99 (L)
n-Octane	0.85 (M)	<0.03	1.61 (H)	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	1.71 (H)
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	1.34 (L)	<0.02	1.02 (H)	0.11 (H)
Ethylbenzene	<0.02	1.63 (M)	0.58 (H)	0.17 (H)	0.13 (M)
m/p-Xylene	2.30 (M)	2.90 (H)	2.93 (H)	1.55 (H)	0.91 (H)
Styrene/o-Xylene	0.76 (L)	<0.02	0.52 (H)	0.08 (H)	0.44 (L)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

TABLE A11. HAIN (Continued)

Sample Date Sample ID	08/25/88 0595	09/08/88 0617	09/08/88 0617R	09/18/88 0641D	09/18/88 0642D
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	1.53 (M)	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	0.64 (L)	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	0.40 (H)	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	0.977(L)	1.034(M)	2.374(L)	1.417(H)
1,1,1-Trichloroethane	<0.001	0.657(L)	0.699(H)	0.682(L)	0.703(H)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene	1.89 (H)	0.37 (H)	0.41 (H)	0.48 (H)	0.40 (H)
Trichloroethylene	0.166(M)	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	0.26 (H)
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	2.10 (H)	0.94 (H)	1.24 (H)	1.33 (L)	1.21 (L)
n-Octane	<0.03	0.48 (L)	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	0.10 (L)	0.05 (H)	0.07 (M)	<0.02
Ethylbenzene	0.22 (H)	0.19 (L)	0.13 (H)	0.15 (H)	0.11 (H)
m/p-Xylene	1.30 (H)	0.80 (M)	0.51 (H)	0.84 (H)	0.61 (H)
Styrene/o-Xylene	0.32 (H)	0.18 (H)	0.23 (H)	<0.02	<0.02
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	0.360(H)	0.683(H)	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level

D Duplicate sample R Replicate analysis

TABLE A12. MULTIPLE DETECTOR SPECIATED UATMP DATA SUMMARY FOR JAFL

Sample Date Sample ID	10/01/87 0024	10/12/87 0009	12/23/87 0061	11/05/87 0047	11/18/87 0079
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	<0.001	<0.001	<0.001	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	<0.04	1.03 (L)	1.06 (L)
Benzene/1,2-Dichloroethane	<0.04	<0.04	<0.04	2.68 (M)	1.76 (H)
Benzene	<0.04	<0.04	<0.04	1.65 (M)	0.70 (H)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	<0.02	<0.02	<0.02	2.31 (M)	<0.02
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	<0.04	<0.04	<0.04	8.99 (H)	3.49 (M)
Styrene/o-Xylene	<0.02	3.39 (M)	<0.02	2.85 (M)	<0.02
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	2.63 (M)	<0.02	<0.02	0.55 (H)

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

TABLE A12. JAFL (Continued)

Sample Date Sample ID	11/29/87 0094	11/29/87 0094R	12/11/87 0124D	12/11/87 0125D	12/22/87 0156
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	1.04 (M)
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	<0.001	<0.001	<0.001	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	0.56 (L)	0.57 (L)	2.71 (L)	3.10 (L)	0.61 (L)
Benzene/1,2-Dichloroethane	1.73 (M)	1.63 (M)	4.55 (H)	5.72 (L)	1.48 (H)
Benzene	1.17 (M)	1.06 (M)	1.84 (H)	2.62 (L)	0.87 (H)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	1.38 (L)	1.26 (L)	7.83 (H)	7.70 (H)	<0.02
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	0.95 (M)	<0.02	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	4.38 (H)	4.29 (M)	18.85 (M)	22.52 (H)	<0.04
Styrene/o-Xylene	<0.02	<0.02	5.76 (M)	6.28 (M)	<0.02
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	2.10 (M)	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample R Replicate analysis

TABLE A12. JAFL (Continued)

Sample Date	01/05/88	01/19/88	01/29/88	02/09/88	02/09/88
Sample ID	0171 (a)	0200	0217	0241	0241R
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	<0.001	0.117(H)	<0.001	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	4.42 (L)	1.81 (L)	<0.04	1.56 (L)	1.63 (L)
Benzene/1,2-Dichloroethane	4.48 (H)	1.97 (H)	<0.04	1.65 (H)	1.72 (H)
Benzene	0.38 (H)	0.16 (H)	<0.04	0.09 (H)	0.09 (H)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	2.56 (H)	<0.02	1.90 (M)	<0.02	<0.02
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	0.61 (M)
1,1,2-Trichloroethane	<0.02	0.69 (M)	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	3.69 (H)	1.11 (L)	4.66 (H)	1.33 (H)	1.30 (L)
Styrene/o-Xylene	1.23 (H)	0.67 (L)	<0.02	0.77 (M)	2.12 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	0.33 (M)	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	1.52 (M)	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

(a) Sampled for 48.2 hours

R Replicate analysis

TABLE A12. JAFL (Continued)

Sample Date	02/21/88	03/05/88	03/16/88	03/28/88	03/28/88
Sample ID	0254	0267 (a)	0290	0371D	0318D
Compound			Concentration, ppbv		
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	0.52 (H)
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	0.054(L)	0.033(H)
Chloroform	1.323(M)	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	0.073(M)	0.071(L)	0.168(H)	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	2.81 (L)	1.50 (L)	<0.04	1.31 (L)	1.57 (L)
Benzene/1,2-Dichloroethane	3.00 (H)	1.64 (H)	<0.04	1.51 (H)	1.68 (H)
Benzene	0.19 (H)	0.14 (H)	<0.04	0.20 (H)	0.11 (H)
Trichloroethylene	2.288(H)	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	2.20 (H)	0.72 (H)	0.46 (H)	2.05 (H)	2.46 (H)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	0.28 (H)	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	1.09 (M)	<0.02	<0.02	<0.02	0.08 (M)
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	13.50 (H)	<0.04	0.14 (H)	0.66 (M)	0.61 (H)
Styrene/o-Xylene	3.25 (H)	<0.02	0.06 (M)	0.24 (M)	0.24 (H)
Bromoform	1.549(M)	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	3.60 (H)	<0.02	<0.02	<0.02	0.11 (L)
p-Dichlorobenzene	4.30 (M)	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	4.80 (H)	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level

(Continued)

(a) Sampled for 13 hours

D Duplicate sample

TABLE A12. JAFL (Continued)

Sample Date	04/09/88	04/21/88	05/03/88	05/27/88	06/09/88
Sample ID	0334	0362	0373	0421	0443
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	<0.001	<0.001	<0.001	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	4.83 (L)	0.48 (L)	<0.04
Benzene/1,2-Dichloroethane	<0.04	<0.04	5.44 (M)	0.98 (H)	<0.04
Benzene	<0.04	<0.04	0.61 (M)	0.50 (H)	<0.04
Trichloroethylene	<0.004	<0.004	1.000(L)	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	1.20 (L)	1.90 (L)	9.06 (H)	3.39 (M)	1.18 (H)
n-Octane	3.53 (L)	<0.03	<0.03	0.87 (M)	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	0.85 (L)	<0.02
Ethylbenzene	<0.02	4.21 (M)	8.06 (L)	1.08 (H)	<0.02
m/p-Xylene	0.78 (L)	0.99 (H)	3.34 (M)	2.93 (L)	1.08 (L)
Styrene/o-Xylene	1.29 (L)	1.35 (M)	3.46 (M)	1.43 (M)	0.33 (L)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	0.36 (L)	<0.02	1.19 (M)	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	16.76 (H)	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	1.16 (L)	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

TABLE A12. JAFL (Continued)

Sample Date Sample ID	06/20/88 0458	07/02/88 0479D	07/02/88 0480D	07/14/88 0510D	07/14/88 0511D
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	0.12 (L)	0.22 (L)
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	0.28 (H)	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	<0.001	<0.001	6.463(H)	6.450(H)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	2.36 (L)	<0.04	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	2.98 (L)	<0.04	<0.04	<0.04	<0.04
Benzene	0.62 (L)	0.58 (M)	0.54 (M)	0.50 (H)	0.38 (H)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	3.72 (H)	1.55 (H)	1.53 ((H	1.00 (H)	0.95 (H)
n-Octane	0.53 (M)	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	0.48 (H)	0.14 (M)	0.18 (H)	<0.02	<0.02
Ethylbenzene	0.46 (L)	1.11 (H)	1.10 (H)	<0.02	0.13 (H)
m/p-Xylene	2.44 (H)	0.19 (L)	0.20 (H)	0.65 (H)	0.61 (M)
Styrene/o-Xylene	1.13 (H)	<0.02	<0.02	0.07 (L)	0.17 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample

TABLE A12. JAFL (Continued)

Sample Date Sample ID	08/03/88 0547	08/09/88 0557	08/19/88 0579	09/01/88 0607	09/21/88 0646
Compound			Concentration, ppbv		
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	13.26 (L)	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	0.71 (M)	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	0.743(H)	1.186(H)	<0.001	<0.001	1.667(M)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene	0.79 (M)	1.81 (H)	0.37 (H)	1.22 (M)	1.07 (H)
Trichloroethylene	<0.004	0.119(H)	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	0.46 (H)	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	4.02 (H)	6.71 (L)	3.00 (H)	2.92 (L)	3.44 (H)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	0.09 (H)	<0.02	2.30 (H)
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	0.11 (M)	0.15 (M)	0.08 (M)
Ethylbenzene	0.71 (H)	0.53 (H)	0.28 (H)	0.35 (H)	0.35 (M)
m/p-Xylene	4.33 (H)	3.14 (H)	1.79 (H)	1.95 (H)	2.46 (M)
Styrene/o-Xylene	1.58 (H)	0.93 (H)	0.55 (H)	0.94 (H)	0.74 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	2.80 (M)	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

TABLE A12. JAFL (Continued)

Sample Date	09/21/88	10/01/88
Sample ID	0646R	0656
Compound	Concentration, ppbv	
Acetylene	<1.00	<1.00
Propylene	<0.10	<0.10
Chloromethane	<0.20	<0.20
Vinyl chloride	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10
Bromomethane	<0.20	<0.20
Chloroethane	<0.10	<0.10
Methylene chloride	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04
Chloroprene	<0.06	<0.06
Bromochloromethane	<0.003	<0.003
Chloroform	<0.006	<0.006
1,1,1-Trichloroethane	1.664(L)	0.689(M)
Carbon tetrachloride	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04
Benzene/1,2-Dichloroethane	<0.04	<0.04
Benzene	1.57 (M)	0.44 (H)
Trichloroethylene	<0.004	0.414(H)
1,2-Dichloropropane	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04
Toluene	3.60 (H)	1.26 (M)
n-Octane	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02
Tetrachloroethylene	0.16 (H)	0.12 (M)
Dibromochloromethane	<0.001	<0.001
Chlorobenzene	0.07 (L)	<0.02
Ethylbenzene	0.34 (M)	0.17 (M)
m/p-Xylene	2.23 (H)	0.84 (M)
Styrene/o-Xylene	0.70 (H)	<0.02
Bromoform	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level

R Replicate analysis

TABLE A13. MULTIPLE DETECTOR SPECIATED UATMP DATA SUMMARY FOR L2KY

Sample Date Sample ID	09/30/87 0003	10/24/87 0036	10/24/87 0036R	11/05/87 0045	11/17/87 0096
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	0.30 (L)	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	<0.001	<0.001	<0.001	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	0.52 (L)	2.33 (L)	<0.04	<0.04
Benzene/1,2-Dichloroethane	<0.04	1.85 (M)	3.81 (L)	<0.04	<0.04
Benzene	<0.04	1.33 (M)	1.48 (L)	<0.04	<0.04
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	1.86 (M)	3.22 (L)	3.11 (L)	0.98 (H)	2.90 (H)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	0.69 (L)	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	0.33 (M)	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	9.23 (M)	12.74 (H)	15.39 (H)	7.59 (H)	4.36 (H)
Styrene/o-Xylene	<0.02	3.70 (M)	3.94 (M)	1.51 (M)	0.77 (M)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

R Replicate analysis

TABLE A13. L2KY (Continued)

Sample Date Sample ID	11/29/87 0105D	11/29/87 0106D	12/11/87 0132	12/23/87 0212	01/04/88 0188 (a)
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	0.4[illegible]2(H)	0.425(M)	<0.001	<0.001	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	1.06 (L)	0.99 (L)	2.37 (L)	1.34 (L)	0.81 (L)
Benzene/1,2-Dichloroethane	2.12 (H)	2.10 (H)	4.27 (H)	3.93 (H)	0.97 (L)
Benzene	1.06 (H)	1.11 (H)	1.90 (H)	2.59 (H)	0.16 (L)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	1.38 (H)	0.54 (H)	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	5.64 (H)	5.62 (H)	5.40 (H)	6.07 (H)	0.26 (H)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	0.24 (H)	0.28 (H)	<0.02	1.91 (M)	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	2.77 (H)	3.09 (H)	16.39 (H)	18.88 (H)	0.42 (H)
Styrene/o-Xylene	<0.02	<0.02	2.51 (H)	4.23 (H)	0.09 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	2.15 (L)	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	0.21 (L)

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

(a) Sampled for 96 hours

D Duplicate sample

TABLE A13. LCKY (Continued)

Sample Date Sample ID	01/16/88 0220	01/28/88 0213	02/09/88 0224	02/21/88 0251	02/21/88 0251R
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	0.377(H)	0.091(M)	<0.001	0.036(H)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	2.81 (L)	<0.04	<0.04
Benzene/1,2-Dichloroethane	<0.04	<0.04	3.00 (L)	<0.04	<0.04
Benzene	<0.04	<0.04	0.19 (L)	<0.04	<0.04
Trichloroethylene	<0.004	<0.004	0.328	<0.004	0.075(L)
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	0.92 (M)	3.48 (M)	3.18 (M)	0.46 (M)	0.51 (H)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	3.22 (H)	9.17 (M)	6.01 (H)	0.64 (H)	0.58 (H)
Styrene/o-Xylene	0.83 (M)	2.42 (L)	1.78 (L)	<0.02	<0.02
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	0.05 (M)	<0.02
p-Dichlorobenzene	<0.09	<0.09	1.25 (L)	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	0.39 (L)	0.27 (L)	0.21 (L)

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

R Replicate analysis

TABLE A13. L2KY (Continued)

Sample Date Sample ID	03/05/88 0310	03/16/88 0312D	03/16/88 0313D	04/09/88 0344	04/21/88 0361
Compound			Concentration, ppbv		
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	0.09 (L)	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	0.032(H)	<0.001	0.257(L)	0.304(H)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	<0.04	2.54 (L)	1.23 (L)
Benzene/1,2-Dichloroethane	<0.04	<0.04	<0.04	2.68 (M)	1.38 (M)
Benzene	<0.04	<0.04	<0.04	0.14 (M)	0.15 (M)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	1.69 (H)	5.54 (M)	7.23 (M)	1.53 (H)	2.11 (L)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.[illegible]
Chlorobenzene	<0.02	<0.02	0.10 (H)	0.12 (M)	0.27 (M)
Ethylbenzene	<0.02	<0.02	<0.02	1.83 (M)	2.37 (H)
m/p-Xylene	2.96 (H)	1.02 (M)	0.61 (H)	1.28 (L)	1.87 (H)
Styrene/o-Xylene	0.74 (L)	0.18 (L)	0.18 (H)	0.69 (H)	0.60 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	0.07 (H)	<0.02
p-Dichlorobenzene	0.26 (H)	<0.09	<0.09	0.68 (H)	0.42 (L)
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample

TABLE A13. L2KY (Continued)

Sample Date Sample ID	05/03/88 0370	05/14/88 0402	05/14/88 0402R	05/27/88 0427	06/08/88 0487
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	0.82 (M)	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	0.07 (M)	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	0.322(H)	1.025(M)	1.033 (H)	<0.001	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	1.95 (L)	0.78 (L)	1.63 (L)	5.11 (L)	1.28 (L)
Benzene/1,2-Dichloroethane	2.17 (H)	3.25 (L)	3.32 (H)	8.20 (H)	3.08 (L)
Benzene	0.22 (H)	2.47 (L)	1.69 (H)	3.09 (H)	1.80 (L)
Trichloroethylene	<0.004	<0.004	0.387(L)	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	2.43 (M)	9.20 (M)	9.98 (M)	14.71 (H)	31.35 (H)
n-Octane	<0.03	1.85 (M)	1.68 (L)	2.27 (H)	5.09 (M)
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	0.36 (M)	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	0.38 (H)	<0.02	<0.02	0.87 (H)	<0.02
Ethylbenzene	2.07 (H)	2.29 (L)	1.39 (H)	2.35 (H)	<0.02
m/p-Xylene	1.52 (H)	7.52 (M)	6.71 (H)	18.61 (H)	6.30 (L)
Styrene/o-Xylene	0.73 (H)	3.76 (L)	3.17 (H)	4.86 (H)	1.80 (L)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	0.34 (L)
p-Dichlorobenzene	0.58 (H)	2.37 (H)	1.87 (H)	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

R Replicate analysis

TABLE A13. L2KY (Continued)

Sample Date Sample ID	06/20/88 0471D	06/20/88 0472D	07/02/88 0521	07/14/88 0508	07/14/88 0508R
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	3.77 (M)	4.09 (M)
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	0.26 (M)	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	2.494(L)	3.255(M)	0.637(L)	0.636(L)	0.443(M)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	3.82 (L)	2.17 (L)	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	6.14 (H)	3.87 (L)	<0.04	<0.04	<0.04
Benzene	2.32 (H)	1.70 (L)	1.26 (H)	1.34 (H)	1.65 (H)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	0.044(H)	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	19.75 (H)	14.48 (H)	1.96 (H)	10.77 (H)	10.83 (H)
n-Octane	<0.03	<0.03	<0.03	0.64 (L)	0.69 (M)
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	1.20 (H)	0.92 (H)	0.34 (H)	0.46 (H)	0.43 (H)
m/p-Xylene	6.61 (H)	4.86 (H)	2.58 (H)	2.72 (H)	2.79 (H)
Styrene/o-Xylene	1.86 (H)	1.70 (H)	0.42 (H)	0.66 (H)	0.65 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample R Replicate analysis

TABLE A13. L2KY (Continued)

Sample Date Sample ID	07/26/88 0575	08/07/88 0573	08/19/88 0640	08/31/88 0638	09/12/88 0637
Compound	Concentration, ppbv				
Acetylene	14.64 (L)	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	0.37 (H)	0.89 (M)	0.52 (M)	0.34 (M)	0.30 (M)
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	0.26 (L)	<0.04	<0.04	<0.04	0.12 (L)
Chloroprene	0.48 (H)	<0.06	0.74 (H)	0.20 (M)	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	3.116(M)	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	0.678(M)	<0.001	1.660(L)	0.600(M)	0.802(M)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene	1.61 (H)	2.98 (M)	2.83 (H)	2.56 (H)	1.72 (M)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	0.686(H)
1,2-Dichloropropane	<0.04	<0.04	1.39 (M)	<0.04	0.26 (H)
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	18.99 (H)	9.04 (M)	17.71 (H)	7.65 (L)	5.17 (H)
n-Octane	<0.03	<0.03	<0.03	0.33 (L)	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	0.19 (L)	0.46 (L)	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	0.26 (L)	0.17 (M)	0.23 (M)	<0.02	<0.02
Ethylbenzene	0.83 (H)	0.88 (H)	1.03 (M)	<0.02	1.29 (H)
m/p-Xylene	5.09 (H)	5.63 (H)	6.40 (M)	1.45 (M)	8.72 (M)
Styrene/o-Xylene	1.06 (H)	1.36 (H)	1.71 (H)	0.16 (L)	1.49 (M)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	0.418(H)
m-Dichlorobenzene	<0.02	<0.02	0.18 (M)	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	4.33 (M)	<0.09	0.53 (M)
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

TABLE A13. L2KY (Continued)

Sample Date	10/06/88	10/06/88
Sample ID	0657D	0658D
Compound	Concentration, ppbv	
Acetylene	<1.00	<1.00
Propylene	6.67 (L)	4.59 (M)
Chloromethane	<0.20	<0.20
Vinyl chloride	<0.20	<0.20
1,3-Butadiene	0.21 (H)	0.16 (H)
Bromomethane	<0.20	<0.20
Chloroethane	<0.10	<0.10
Methylene chloride	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	0.28 (H)
1,1-Dichloroethane	<0.04	<0.04
Chloroprene	<0.06	<0.06
Bromochloromethane	<0.003	<0.003
Chloroform	<0.006	<0.006
1,1,1-Trichloroethane	0.566(L)	0.712(L)
Carbon tetrachloride	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04
Benzene/1,2-Dichloroethane	<0.04	<0.04
Benzene	<0.04	<0.04
Trichloroethylene	<0.004	0.394(L)
1,2-Dichloropropane	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04
Toluene	8.31 (H)	5.90 (H)
n-Octane	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001
Chlorobenzene	0.27 (H)	0.26 (H)
Ethylbenzene	1.70 (H)	1.21 (H)
m/p-Xylene	11.56 (H)	8.15 (H)
Styrene/o-Xylene	2.39 (H)	1.77 (H)
Bromoform	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level

D Duplicate sample

TABLE A14. MULTIPLE DETECTOR SPECIATED UATMP DATA SUMMARY FOR LAMI

Sample Date	10/06/87	10/18/87	10/30/87	10/30/87	11/11/87
Sample ID	0025	0034	0108	0108R	0064
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	<0.001	<0.001	<0.001	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene	<0.04	<0.04	<0.04	<0.04	<0.04
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	<0.02	1.45 (M)	1.79 (H)	2.35 (H)	0.88 (H)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	0.47 (L)	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	6.47 (H)	4.67 (H)	7.15 (L)	5.80 (L)	3.76 (M)
Styrene/o-Xylene	<0.02	1.21 (L)	0.70 (L)	<0.02	<0.02
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

R Replicate analysis

TABLE A14. LAMI (Continued)

Sample Date Sample ID	11/23/87 0085	11/23/87 0085R	12/05/87 0119	12/17/87 0136D	12/17/87 0137D
Compound			Concentration, ppbv		
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	0.626(M)
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	<0.001	<0.001	<0.001	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	0.61 (L)	0.70 (L)	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	0.95 (M)	1.05 (M)	<0.04	<0.04	<0.04
Benzene	0.34 (M)	0.35 (M)	<0.04	<0.04	<0.04
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	0.53 (M)
Toluene	0.90 (H)	1.34 (H)	1.25 (L)	0.38 (H)	0.43 (H)
n-Octane	<0.03	<0.03	2.59 (M)	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	0.52 (H)
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	0.13 (H)	0.32 (M)
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	7.20 (H)	7.50 (H)	7.47 (H)	1.35 (M)	1.29 (M)
Styrene/o-Xylene	0.07 (M)	<0.02	<0.02	<0.02	0.13 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	0.493(M)
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	1.66 (M)
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	2.01 (M)
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	1.35 (M)

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample R Replicate analysis

TABLE A14. LAMI (Continued)

Sample Date	12/29/87	01/10/88	01/22/88	02/03/88	02/15/88
Sample ID	0147	0174	0199	0234	0245
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	<0.001	0.102(H)	0.149(L)	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	<0.04	1.71 (L)	<0.04
Benzene/1,2-Dichloroethane	<0.04	<0.04	<0.04	1.91 (L)	<0.04
Benzene	<0.04	<0.04	<0.04	0.20 (L)	<0.04
Trichloroethylene	<0.004	<0.004	<0.004	1.03 (L)	<0.004
1,2-Dichloropropane	0.97 (L)	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	2.04 (H)	0.51 (H)	0.77 (M)	10.56 (H)	0.20 (M)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	0.18 (L)	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	0.07 (M)	0.18 (L)	0.34 (L)	0.13 (L)
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	21.89 (H)	1.00 (H)	4.16 (H)	5.60 (H)	0.50 (H)
Styrene/o-Xylene	5.89 (M)	0.28 (M)	0.83 (M)	1.14 (L)	0.15 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	0.04 (M)	0.08 (L)	0.27 (H)	<0.02
p-Dichlorobenzene	9.23 (H)	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	0.27 (L)	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

TABLE A14. LAMI (Continued)

Sample Date Sample ID	02/15/88 0245R	02/27/88 0270	03/10/88 0288	03/22/88 0305	04/03/88 0322
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	0.231(L)	<0.001	<0.001	0.012(M)	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	<0.04	2.65 (L)	0.57 (L)
Benzene/1,2-Dichloroethane	<0.04	<0.04	<0.04	3.00 (M)	0.62 (H)
Benzene	<0.04	<0.04	<0.04	0.35 (M)	0.05 (H)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	0.60 (M)	<0.04	<0.04	<0.04
Toluene	0.22 (M)	<0.02	0.62 (L)	2.87 (H)	0.80 (H)
n-Octane	<0.03	<0.03	<0.03	0.44 (H)	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	0.29 (M)	<0.02	0.23 (H)	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	0.77 (L)	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	<0.02	0.29 (M)
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	0.53 (H)	0.15 (L)	0.25 (M)	0.55 (H)	<0.04
Styrene/o-Xylene	0.21 (L)	<0.02	<0.02	0.34 (H)	<0.02
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	0.02 (M)	<0.02	0.12 (L)	0.07 (M)
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	0.33 (M)	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

R Replicate analysis

TABLE A14. LAMI (Continued)

Sample Date Sample ID	04/15/88 0353	04/27/88 0367	04/27/88 0367R	05/09/88 0385	05/21/88 0405
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	0.262(H)
1,1,1-Trichloroethane	0.263(H)	<0.001	0.248(M)	<0.001	0.988(L)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	0.68 (L)	1.01 (L)	2.22 (L)	1.37 (L)
Benzene/1,2-Dichloroethane	<0.04	0.75 (H)	1.09 (H)	2.32 (L)	3.72 (M)
Benzene	<0.04	0.07 (H)	0.08 (H)	0.10 (L)	2.35 (M)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	0.27 (M)	0.56 (H)	0.45 (L)	1.78 (L)	7.41 (H)
n-Octane	<0.03	<0.03	<0.03	2.21 (M)	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	0.35 (H)	0.35 (H)	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	<0.02	0.42 (M)	0.48 (M)	1.42 (H)	0.76 (L)
m/p-Xylene	0.05 (H)	0.25 (H)	0.25 (H)	0.93 (L)	5.64 (L)
Styrene/o-Xylene	0.04 (M)	0.08 (L)	0.12 (H)	0.69 (L)	1.82 (L)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	0.46 (M)
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

R Replicate analysis

TABLE A14. LAMI (Continued)

Sample Date Sample ID	06/02/88 0431	06/14/88 0451	06/26/88 0468	07/08/88 0494D	07/08/88 0495D
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	1.84 (M)	1.75 (M)
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	<0.001	<0.001	0.516(H)	0.398(L)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	0.35 (L)	0.55 (L)	0.18 (L)	<0.04	<0.04
Benzene/1,2-Dichloroethane	0.65 (H)	1.27 (M)	0.29 (H)	<0.04	<0.04
Benzene	0.30 (H)	0.72 (M)	0.11 (H)	0.46 (H)	0.45 (H)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	<0.02	9.62 (L)	<0.02	1.94 (H)	1.68 (H)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	0.46 (M)	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	<0.02	3.35 (L)	<0.02	0.12 (M)	0.14 (L)
m/p-Xylene	<0.04	14.68 (H)	0.52 (H)	1.06 (H)	0.93 (H)
Styrene/o-Xylene	<0.02	4.86 (M)	<0.02	0.18 (M)	0.11 (L)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	0.56 (L)	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	4.62 (M)	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample

TABLE A14. LAMI (Continued)

Sample Date Sample ID	07/20/88 0520	07/20/88 0520R	08/01/88 0545	08/13/88 0568	08/25/88 0591
Compound			Concentration, ppbv		
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	16.14 (H)	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	<0.001	0.383(H)	<0.001	0.474(M)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene	1.55 (H)	0.73 (M)	0.44 (H)	0.68 (H)	0.50 (H)
Trichloroethylene	<0.004	<0.004	<0.004	0.704(H)	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	17.52 (H)	17.08 (M)	1.30 (M)	8.21 (H)	1.62 (H)
n-Octane	0.39 (H)	0.72 (L)	<0.03	<0.03	0.20 (M)
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	0.22 (H)	0.13 (L)
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	0.19 (M)	<0.02
Ethylbenzene	0.63 (H)	0.61 (H)	0.40 (H)	0.64 (H)	0.41 (H)
m/p-Xylene	4.43 (H)	4.38 (H)	3.41 (H)	4.06 (H)	2.79 (H)
Styrene/o-Xylene	0.95 (H)	0.88 (H)	0.53 (H)	0.91 (H)	0.50 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	1.30 (L)	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

R Replicate analysis

TABLE A14. LAMI (Continued)

Sample Date	09/07/88	09/18/88
Sample ID	0609	0636
Compound	Concentration, ppbv	
Acetylene	<1.00	<1.00
Propylene	<0.10	<0.10
Chloromethane	<0.20	<0.20
Vinyl chloride	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10
Bromomethane	<0.20	<0.20
Chloroethane	<0.10	<0.10
Methylene chloride	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04
Chloroprene	<0.06	<0.06
Bromochloromethane	<0.003	<0.003
Chloroform	<0.006	<0.006
1,1,1-Trichloroethane	0.410(H)	0.370(L)
Carbon tetrachloride	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04
Benzene/1,2-Dichloroethane	<0.04	<0.04
Benzene	0.94 (M)	0.73 (H)
Trichloroethylene	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04
Toluene	2.14 (H)	2.27 (H)
n-Octane	0.18 (L)	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	0.20 (M)
1,1,2-Trichloroethane	<0.02	<0.02
Tetrachloroethylene	0.25 (L)	0.12 (H)
Dibromochloromethane	<0.001	<0.001
Chlorobenzene	<0.02	<0.02
Ethylbenzene	0.49 (H)	0.25 (M)
m/p-Xylene	3.61 (H)	1.47 (M)
Styrene/o-Xylene	0.62 (H)	0.34 (M)
Bromoform	<0.001	<0.001
1,1,2,2-Tetrachloroethane	1.601(M)	<0.002
m-Dichlorobenzene	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level

TABLE A15. MULTIPLE DETECTOR SPECIATED UATMP DATA SUMMARY FOR MDMI

Sample Date	10/06/87	10/18/87	10/30/87	11/11/87	11/23/87
Sample ID	0018	0033 (a)	0059	0068	0090
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	<0.001	0.660(L)	0.374(H)	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	3.27 (L)	0.16 (L)	<0.04	<0.04
Benzene/1,2-Dichloroethane	<0.04	8.94 (M)	1.91 (M)	<0.04	3.63 (H)
Benzene	<0.04	5.67 (M)	1.75 (M)	<0.04	1.91 (H)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	1.39 (M)	1.38 (H)	1.43 (H)	6.55 (H)	2.94 (H)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	1.11 (M)	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	3.14 (H)	<0.07	1.84 (M)
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	0.45 (M)	0.39 (L)	0.77 (M)	1.30 (H)
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	4.78 (H)	3.37 (M)	3.43 (H)	2.76 (H)	1.81 (H)
Styrene/o-Xylene	1.97 (M)	<0.02	<0.02	0.42 (H)	0.52 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

(a) Sampled for 39.1 hours

TABLE A15. MDMI (Continued)

Sample Date	12/05/87	12/16/87	12/16/87	12/28/87	01/11/88
Sample ID	0121	0134D	0135D	0159	0185
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	<0.001	<0.001	<0.001	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	4.75 (L)
Benzene/1,2-Dichloroethane	4.42 (M)	0.88 (L)	<0.04	<0.04	5.30 (H)
Benzene	6.75 (M)	0.79 (L)	<0.04	<0.04	0.55 (H)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	0.37 (M)	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	0.39 (M)	0.59 (H)	0.70 (L)	1.00 (H)	3.18 (H)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	7.40 (L)	1.47 (H)	1.48 (L)	2.92 (H)	<0.04
Styrene/o-Xylene	3.67 (L)	0.39 (M)	0.17 (L)	0.70 (M)	<0.02
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	0.31 (M)	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample

TABLE A15. MDMI (Continued)

Sample Date	01/25/88	02/03/88	02/16/88	02/16/88	03/02/88
Sample ID	0202	0232	0240	0240R	0271
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	0.118(M)	0.062(H)	<0.001	<0.001	0.375(H)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	1.66 (L)	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	<0.04	1.83 (L)	<0.04	<0.04	<0.04
Benzene	<0.04	0.17 (L)	<0.04	<0.04	<0.04
Trichloroethylene	3.616(L)	<0.004	0.069(L)	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	6.87 (L)	0.46 (M)	0.67 (L)	0.77 (M)	0.67 (H)
n-Octane	1.47 (L)	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	0.22 (H)	<0.02	<0.02
Tetrachloroethylene	0.58 (M)	0.09 (L)	0.26 (M)	0.16 (L)	0.22 (L)
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	0.91 (H)	<0.02	0.05 (H)	0.08 (M)	0.04 (M)
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	8.51 (H)	1.44 (H)	0.50 (H)	0.53 (H)	0.16 (H)
Styrene/o-Xylene	2.82 (H)	0.28 (H)	0.15 (H)	0.24 (M)	0.15 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

R Replicate analysis

TABLE A15. MDMI (Continued)

Sample Date	03/11/88	03/22/88	03/22/88	04/03/88	04/03/88
Sample ID	0298	0306D (a)	0307D (a)	0331D	0332D
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	0.95 (H)	<0.04	<0.04	0.36 (M)	0.22 (H)
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	0.115(M)
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	0.193(H)	<0.001	<0.001	<0.001	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	1.16 (L)
Benzene/1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	1.26 (H)
Benzene	<0.04	<0.04	<0.04	<0.04	0.10 (H)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	0.72 (L)	0.31 (H)	0.41 (L)	0.828(L)	0.97 (M)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	0.11 (H)	<0.02	<0.02	<0.02	0.13 (M)
Tetrachloroethylene	<0.07	<0.07	<0.07	0.86 (M)	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	0.72 (H)	0.42 (L)
m/p-Xylene	0.24 (H)	0.13 (M)	<0.04	0.13 (H)	0.08 (L)
Styrene/o-Xylene	0.18 (H)	0.05 (H)	<0.02	0.29 (H)	0.27 (M)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	0.06 (M)	<0.02	0.03 (L)	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	0.27 (M)	0.50 (H)
o-Dichlorobenzene	<0.02	<0.02	<0.02	0.41 (L)	0.12 (H)

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

(a) Sampled for 35 hours

D Duplicate sample

TABLE A15. MDMI (Continued)

Sample Date Sample ID	04/15/88 0346	04/27/88 0369	04/27/88 0369R	05/09/88 0391	05/23/88 0407
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	0.329(L)
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	0.289(H)	0.308(H)	0.632(M)	0.993(M)
Carbon tetrachloride	0.400(H)	<0.001	<0.001	0.586(H)	<0.001
1,2-Dichloroethane	<0.04	0.73 (L)	0.61 (L)	0.52 (L)	1.69 (L)
Benzene/1,2-Dichloroethane	<0.04	0.80 (H)	0.68 (M)	1.19 (H)	3.15 (H)
Benzene	<0.04	0.07 (H)	0.07 (M)	0.67 (H)	1.46 (H)
Trichloroethylene	<0.004	<0.004	<0.004	0.303(M)	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	0.27 (H)	1.28 (M)	1.01 (M)	1.54 (M)	4.37 (H)
n-Octane	0.23 (H)	<0.03	<0.03	<0.03	1.17 (H)
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	0.45 (H)	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	<0.02	0.59 (M)
Ethylbenzene	<0.02	<0.02	0.10 (H)	0.54 (M)	0.46 (M)
m/p-Xylene	0.09 (H)	<0.04	0.09 (H)	0.09 (H)	2.00 (H)
Styrene/o-Xylene	0.04 (H)	<0.02	<0.02	0.21 (L)	0.70 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	0.04 (M)	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level

R Replicate analysis

TABLE A15. MDMI (Continued)

Sample Date	06/02/88	06/14/88	06/27/88	06/27/88	07/11/88
Sample ID	0430	0453	0466D	0467D	0491
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	<0.001	0.380(H)	<0.001	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	1.14 (L)	2.32 (L)	0.47 (L)	0.50 (L)	<0.04
Benzene/1,2-Dichloroethane	1.71 (H)	4.92 (H)	0.47 (L)	0.71 (M)	<0.04
Benzene	0.57 (H)	2.60 (H)	<0.04	0.21 (M)	2.10 (L)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	4.44 (H)	4.84 (H)	0.38 (L)	0.34 (M)	1.08 (H)
n-Octane	<0.03	1.56 (M)	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	1.83 (L)	1.53 (L)	0.26 (H)	0.26 (H)	<0.04
Styrene/o-Xylene	0.78 (L)	1.76 (L)	<0.02	0.07 (L)	<0.02
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	0.249(L)	<0.002
m-Dichlorobenzene	<0.02	0.82 (H)	0.05 (L)	0.08 (H)	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	0.19 (H)	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample

TABLE A15. MDMI (Continued)

Sample Date Sample ID	07/21/88 0517	08/02/88 0535	08/26/88 0586D	08/26/88 0586R	08/26/88 0587D
Compound	Concentration, ppbv				
Acetylene	<1.00	15.60 (L)	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	12.00 (L)	11.16 (L)	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	9.62 (L)	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	1.97 (L)	1.99 (L)	1.32 (L)
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	0.930(H)	11.481(H)	0.979(H)	0.967(H)	0.944(H)
Carbon tetrachloride	0.421(L)	0.374(H)	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene	0.28 (M)	1.12 (H)	1.57 (H)	1.44 (H)	1.54 (H)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	0.25 (M)	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.00[illegible]
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	1.61 (H)	5.79 (L)	1.01 (H)	0.97 (H)	0.97 (H)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	0.44 (H)	0.77 (H)	0.81 (H)	0.79 (H)
Ethylbenzene	0.12 (L)	0.37 (H)	0.10 (H)	0.09 (H)	0.10 (H)
m/p-Xylene	0.73 (H)	1.37 (H)	0.43 (H)	0.38 (H)	0.55 (H)
Styrene/o-Xylene	<0.02	0.50 (L)	0.13 (M)	0.11 (H)	0.16 (L)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	0.031(H)	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	2.09 (L)	2.03 (L)	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level

D Duplicate sample R Replicate analysis

(Continued)

TABLE A15. MDMI (Continued)

Sample Date Sample ID	08/26/88 0587R	09/08/88 0612D	09/08/88 0613D	09/20/88 0635
Compound	Concentration, ppbv			
Acetylene	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	20.79 (L)	22.54 (L)	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	1.85 (L)	0.66 (H)	0.30 (M)
Bromomethane	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	1.61 (L)	1.38 (L)	<0.10
Methylene chloride	3.29 (H)	8.28 (M)	7.18 (M)	2.67 (H)
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	0.374(H)	0.438(H)	2.767(H)
1,1,1-Trichloroethane	0.906(H)	0.969(H)	0.923(H)	1.389(M)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04
Benzene	1.47 (H)	0.82 (H)	0.78 (H)	1.41 (H)
Trichloroethylene	<0.004	<0.004	<0.004	0.131(H)
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04
Toluene	0.93 (H)	1.99 (H)	1.93 (H)	12.29 (L)
n-Octane	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	2.48 (M)	1.73 (M)	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	0.68 (H)	0.37 (H)	0.43 (M)	<0.02
Ethylbenzene	0.11 (M)	0.62 (H)	0.63 (H)	0.29 (H)
m/p-Xylene	0.40 (H)	1.14 (H)	1.14 (H)	2.30 (M)
Styrene/o-Xylene	0.13 (M)	0.88 (H)	0.89 (H)	<0.02
Bromoform	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level

D Duplicate sample R Replicate analysis

TABLE A16. MULTIPLE DETECTOR SPECIATED UATMP DATA SUMMARY FOR MIFL

Sample Date	10/12/87	10/24/87	11/06/87	11/06/87	11/19/87
Sample ID	0029	0049	0081	0081R	0077
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	1.00 (L)	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	38.01 (M)	38.35 (M)	<0.006
1,1,1-Trichloroethane	<0.001	23.687(M)	<0.001	<0.001	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	0.56 (L)	1.36 (L)	1.63 (L)	1.49 (L)
Benzene/1,2-Dichloroethane	<0.04	1.53 (M)	2.78 (M)	3.05 (L)	2.50 (H)
Benzene	<0.04	0.97 (M)	1.42 (M)	1.42 (L)	1.01 (H)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	2.45 (M)	2.85 (M)	11.18 (H)	10.72 (H)	3.81 (H)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	1.41 (M)
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	0.04 (M)
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	0.97 (L)	1.13 (M)	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	9.48 (L)	6.92 (M)	17.79 (M)	18.14 (H)	<0.04
Styrene/o-Xylene	<0.02	2.04 (M)	4.81 (M)	5.10 (M)	<0.02
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	4.07 (L)	4.15 (M)	<0.09
o-Dichlorobenzene	<0.02	<0.02	1.17 (L)	1.25 (M)	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

R Replicate analysis

TABLE A16. MIFL (Continued)

Sample Date Sample ID	11/30/87 0097	12/15/87 0138	12/28/87 0148D	12/28/87 0149D	01/05/88 0180
Compound			Concentration, ppbv		
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	<0.001	<0.001	<0.001	0.213(L)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	0.25 (L)	2.53 (L)	2.13 (L)	1.94 (L)	2.82 (L)
Benzene/1,2-Dichloroethane	1.57 (H)	4.65 (H)	3.72 (H)	3.33 (H)	3.20 (M)
Benzene	1.32 (H)	2.12 (H)	1.59 (H)	1.39 (H)	0.38 (M)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	3.543(H)
1,2-Dichloropropane	<0.04	<0.04	4.41 (H)	4.72 (H)	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	<0.02	7.05 (H)	6.36 (H)	6.82 (H)	3.69 (H)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	2.28 (M)	1.71 (M)	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	0.21 (M)	0.52 (M)	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	0.26 (M)
Tetrachloroethylene	<0.07	3.29 (L)	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	0.71 (M)	1.33 (H)	1.12 (M)	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	<0.04	<0.04	15.07 (H)	13.28 (H)	7.84 (H)
Styrene/o-Xylene	0.91 (M)	6.52 (M)	4.02 (H)	3.94 (H)	2.15 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	0.66 (M)	<0.02
p-Dichlorobenzene	0.71 (H)	<0.09	2.60 (M)	2.53 (L)	<0.09
o-Dichlorobenzene	<0.02	<0.02	3.89 (M)	2.40 (L)	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample

TABLE A16. MIFL (Continued)

Sample Date Sample ID	01/20/88 0194	02/01/88 0226	02/22/88 0280	02/22/88 0280R	02/29/88 0246
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	6.90 (M)	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	10.001(H)	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	0.572(H)	<0,001	0.205(H)	0.228(H)	0.224(H)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	1.47 (L)	<0.04	1.45 (L)	1.41 (L)	1.84 (L)
Benzene/1,2-Dichloroethane	1.64 (M)	<0.04	1.58 (H)	1.60 (M)	1.93 (H)
Benzene	0.17 (M)	<0.04	0.13 (H)	0.19 (M)	0.09 (H)
Trichloroethylene	5.109(M)	5.421(L)	3.958(L)	3.998(L)	7.636(L)
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	1.74 (M)	3.08 (H)	1.54 (H)	1.49 (H)	2.97 (H)
n-Octane	0.55 (L)	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	1.40 (L)	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	0.11 (L)
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	0.15 (H)	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	2.60 (H)	3.85 (H)	0.61 (H)	0.61 (H)	3.85 (H)
Styrene/o-Xylene	1.16 (H)	0.77 (L)	0.12 (H)	0.28 (M)	1.44 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	0.99 (M)	<0.09	1.84 (M)	1.78 (H)	0.92 (H)
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

R Replicate analysis

TABLE A16. MIFL (Continued)

Sample Date Sample ID	03/10/88 0297	03/21/88 0282	03/28/88 0325	04/09/88 0345	04/21/88 0356D
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	0.86 (M)
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	0.165(L)	<0.001	<0.001	1.418(H)	1.700(H)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	1.26 (L)	1.28 (L)	1.30 (L)	1.00 (L)
Benzene/1,2-Dichloroethane	<0.04	1.39 (H)	1.34 (M)	1.42 (H)	1.13 (M)
Benzene	<0.04	0.13 (H)	0.06 (M)	0.12 (H)	0.13 (M)
Trichloroethylene	<0.004	0.718(M)	<0.004	2.290(H)	4.10 (M)
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	2.87 (M)	1.64 (H)	1.44 (H)	3.75 (H)	2.513(H)
n-Octane	0.44 (L)	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	0.80 (M)	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	0.25 (H)	0.37 (H)	0.24 (H)
Ethylbenzene	<0.02	<0.02	<0.02	1.16 (M)	1.23 (L)
m/p-Xylene	1.25 (M)	0.50 (H)	<0.04	0.62 (H)	0.76 (M)
Styrene/o-Xylene	0.61 (M)	0.31 (M)	0.31 (M)	0.44 (M)	0.58 (M)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	0.08 (L)	0.30 (H)	<0.02
p-Dichlorobenzene	0.58 (L)	0.46 (M)	2.50 (H)	0.72 (H)	2.44 (L)
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample

TABLE A16. MIFL (Continued)

Sample Date	04/21/88	05/03/88	05/15/88	05/15/88	06/08/88
Sample ID	0357D	0372	0380	0380R	0441
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	0.28 (H)	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	29.856(H)
1,1,1-Trichloroethane	1.808(H)	0.200 (H)	2.154(L)	2.102(L)	2.535(H)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	1.26 (L)	0.96 (L)	0.86 (L)	3.18 (L)	0.80 (L)
Benzene/1,2-Dichloroethane	1.39 (H)	1.03 (H)	1.93 (H)	4.38 (H)	1.78 (H)
Benzene	0.13 (H)	0.07 (H)	1.07 (H)	1.20 (H)	0.98 (H)
Trichloroethylene	4.05 (H)	0.48 (H)	1.038(H)	1.649(L)	1.660(L)
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	2.854(H)	1.98 (H)	6.37 (H)	6.51 (H)	5.96 (H)
n-Octane	<0.03	<0.03	1.34 (H)	1.12 (H)	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	0.24 (L)	0.14 (H)	1.16 (L)	1.02 (H)	<0.02
Ethylbenzene	1.60 (H)	0.39 (L)	2.30 (H)	1.03 (H)	<0.02
m/p-Xylene	0.90 (H)	0.31 (H)	5.28 (H)	5.54 (H)	3.32 (H)
Styrene/o-Xylene	0.69 (H)	0.44 (H)	2.58 (H)	2.86 (L)	1.33 (H)
Bromoform	<0.001	<0.001	0.047(M)	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	0.58 (L)	0.49 (L)	0.23 (H)
p-Dichlorobenzene	3.70 (M)	<0.09	<0.09	<0.09	3.14 (M)
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample R Replicate analysis

TABLE A16. MIFL (Continued)

Sample Date Sample ID	06/20/88 [illegible]	[illegible]2/88 0484	07/14/88 0502	07/14/88 0502R	07/26/88 0531D
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	1.40 (M)	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	0.37 (L)
Methylene chloride	<0.11	<0.11	<0.11	<0.11	4.32 (H)
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	2.754(M)	2.990(H)	1.859(H)	1.851(H)	0.74 (L)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	1.30 (L)	<0.04	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	2.53 (H)	<0.04	<0.04	<0.04	<0.04
Benzene	1.23 (H)	1.56 (H)	0.81 (L)	0.81 (M)	1.87 (H)
Trichloroethylene	2.848(M)	<0.004	1.904(H)	1.898(H)	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	6.40 (H)	5.45 (H)	4.54 (H)	4.34 (H)	7.55 (H)
n-Octane	0.84 (M)	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	0.28 (M)
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	0.54 (H)	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	0.97 (H)	0.68 (H)	0.54 (H)	0.55 (H)	0.67 (H)
m/p-Xylene	6.45 (H)	4.21 (H)	4.04 (H)	4.00 (H)	4.75 (H)
Styrene/o-Xylene	2.71 (M)	1.16 (H)	1.15 (H)	1.23 (H)	1.50 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	0.98 (H)	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample R Replicate analysis

TABLE A16. MIFL (Continued)

Sample Date Sample ID	07/26/[illegible] 0532D	[illegible]/07/88 [illegible]	08/19/88 0596	08/19/88 0602	09/12/88 0652
Compound			Concentration, ppbv		
Acetylene	<1.00	10.16 (L)	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	3.11 (M)
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	0.20 (H)	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	0.52 (L)	<0.10	<0.10	<0.10	<0.10
Methylene chloride	4.59 (M)	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	0.58 (M)	<0.04	0.74 (H)	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	0.714(H)	<0.006	<0.006
1,1,1-Trichloroethane	0.848(H)	1.681(H)	2.124(H)	0.913(H)	0.445(M)
Carbon tetrachloride	<0.001	0.165(H)	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene	1.90 (H)	1.12 (H)	0.86 (H)	1.39 (H)	0.71 (H)
Trichloroethylene	<0.004	1.303(L)	1.469(H)	0.574(L)	0.082(L)
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	7.73 (H)	5.95 (H)	5.81 (M)	5.61 (L)	3.62 (H)
n-Octane	<0.03	0.44 (M)	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	0.19 (H)
Tetrachloroethylene	<0.07	0.14 (L)	<0.07	0.41 (M)	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	0.19 (M)	0.16 (H)	0.16 (M)
Ethylbenzene	0.67 (H)	0.56 (H)	0.64 (H)	0.52 (H)	0.36 (H)
m/p-Xylene	4.89 (H)	4.03 (H)	4.46 (H)	3.83 (H)	2.77 (H)
Styrene/o-Xylene	1.49 (H)	1.14 (H)	1.36 (H)	0.94 (H)	0.86 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	3.16 (M)	<0.02	1.73 (L)	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample

TABLE A16. MIFL (Continued)

Sample Date Sample ID	06/20/88 0456	07/02/88 0484	07/14/88 0502	07/14/88 0502R	07/26/88 0531D
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	1.40 (M)	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	0.37 (L)
Methylene chloride	<0.11	<0.11	<0.11	<0.11	4.32 (H)
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	2.754(M)	2.990(H)	1.859(H)	1.851(H)	0.74 (L)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	1.30 (L)	<0.04	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	2.53 (H)	<0.04	<0.04	<0.04	<0.04
Benzene	1.23 (H)	1.56 (H)	0.81 (L)	0.81 (M)	1.87 (H)
Trichloroethylene	2.848(M)	<0.004	1.904(H)	1.898(H)	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	6.40 (H)	5.45 (H)	4.54 (H)	4.34 (H)	7.55 (H)
n-Octane	0.84 (M)	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	0.28 (M)
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	0.54 (H)	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	0.97 (H)	0.68 (H)	0.54 (H)	0.55 (H)	0.67 (H)
m/p-Xylene	6.45 (H)	4.21 (H)	4.04 (H)	4.00 (H)	4.75 (H)
Styrene/o-Xylene	2.71 (M)	1.16 (H)	1.15 (H)	1.23 (H)	1.50 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	0.98 (H)	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample R Replicate analysis

TABLE A16. MIFL (Continued)

Sample Date Sample ID	07/26/88 0532D	08/07/88 0554	08/19/88 0596	08/19/88 0602	09/12/88 0652
Compound	Concentration, ppbv				
Acetylene	<1.00	10.16 (L)	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	3.11 (M)
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	0.20 (H)	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	0.52 (L)	<0.10	<0.10	<0.10	<0.10
Methylene chloride	4.59 (M)	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	0.58 (M)	<0.04	0.74 (H)	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	0.714(H)	<0.006	<0.006
1,1,1-Trichloroethane	0.848(H)	1.681(H)	2.124(H)	0.913(H)	0.445(M)
Carbon tetrachloride	<0.001	0.165(H)	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene	1.90 (H)	1.12 (H)	0.86 (H)	1.39 (H)	0.71 (H)
Trichloroethylene	<0.004	1.303(L)	1.469(H)	0.574(L)	0.082(L)
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	7.73 (H)	5.95 (H)	5.81 (M)	5.61 (L)	3.62 (M)
n-Octane	<0.03	0.44 (M)	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	0.19 (H)
Tetrachloroethylene	<0.07	0.14 (L)	<0.07	0.41 (M)	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	0.19 (M)	0.16 (H)	0.16 (M)
Ethylbenzene	0.67 (H)	0.56 (H)	0.64 (H)	0.52 (H)	0.36 (H)
m/p-Xylene	4.89 (H)	4.03 (H)	4.46 (H)	3.83 (H)	2.77 (H)
Styrene/o-Xylene	1.49 (H)	1.14 (H)	1.36 (H)	0.94 (H)	0.86 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	3.16 (M)	<0.02	1.73 (L)	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample

TABLE A16. MIFL (Continued)

Sample Date	09/24/88
Sample ID	0654
Compound	Concentration, ppbv
Acetylene	<1.00
Propylene	<0.10
Chloromethane	<0.20
Vinyl chloride	<0.20
1,3-Butadiene	<0.10
Bromomethane	<0.20
Chloroethane	<0.10
Methylene chloride	<0.11
trans-1,2-Dichloroethylene	<0.04
1,1-Dichloroethane	<0.04
Chloroprene	0.10 (H)
Bromochloromethane	<0.003
Chloroform	<0.006
1,1,1-Trichloroethane	7.087(H)
Carbon tetrachloride	<0.001
1,2-Dichloroethane	<0.04
Benzene/1,2-Dichloroethane	<0.04
Benzene	1.64 (H)
Trichloroethylene	0.923(L)
1,2-Dichloropropane	<0.04
Bromodichloromethane	<0.001
cis-1,3-Dichloropropylene	<0.04
Toluene	8.01 (H)
n-Octane	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03
trans-1,3-Dichloropropylene	<0.04
1,1,2-Trichloroethane	<0.02
Tetrachloroethylene	0.86 (M)
Dibromochloromethane	<0.001
Chlorobenzene	0.26 (H)
Ethylbenzene	0.84 (M)
m/p-Xylene	4.75 (H)
Styrene/o-Xylene	1.42 (H)
Bromoform	<0.001
1,1,2,2-Tetrachloroethane	<0.002
m-Dichlorobenzene	<0.02
p-Dichlorobenzene	24.56 (M)
o-Dichlorobenzene	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level

TABLE A17. MULTIPLE DETECTOR SPECIATED UATMP DATA SUMMARY FOR P2OR

Sample Date Sample ID	10/15/87 0014	10/31/87 0041	10/31/87 0041R	11/07/87 0044	11/17/87 0074D
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	1.07 (H)	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	0.090(H)
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	<0.001	<0.001	<0.001	0.639(M)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	0.68 (L)	1.49 (L)	1.58 (L)	<0.04	<0.04
Benzene/1,2-Dichloroethane	3.37 (L)	4.39 (M)	4.53 (M)	<0.04	<0.04
Benzene	2.69 (L)	2.90 (M)	2.95 (M)	<0.04	<0.04
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	1.80 (H)	3.40 (H)	3.61 (M)	3.89 (H)	2.28 (H)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	0.97 (H)	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	1.39 (L)	1.16 (H)	<0.02	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	13.69 (H)	17.22 (M)	16.42 (H)	12.29 (H)	9.65 (M)
Styrene/o-Xylene	3.15 (L)	3.62 (L)	3.72 (M)	<0.02	<0.02
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level

D Duplicate sample R Replicate analysis

(Continued)

TABLE A17. P2OR (Continued)

Sample Date Sample ID	11/17/87 0075D	11/30/87 0098	12/11/87 0131	12/23/87 0166	01/06/88 0187
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	0.541(M)	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	1.775(M)	<0.001	<0.001	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	1.12 (L)	0.75 (L)	0.45 (L)	<0.04	<0.04
Benzene/1,2-Dichloroethane	3.15 (H)	1.72 (H)	0.98 (H)	2.77 (H)	<0.04
Benzene	2.03 (H)	0.97 (H)	0.53 (H)	1.53 (H)	<0.04
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	1.43 (H)	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	2.29 (M)	<0.04	<0.04	<0.04
Toluene	2.03 (H)	3.28 (M)	1.68 (H)	1.57 (H)	<0.02
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	1.52 (M)	<0.03	<0.03
trans-1,3-Dichloropropylene	0.08 (M)	2.29 (M)	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	0.14 (L)
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	0.95 (H)	<0.02	<0.02	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	8.61 (H)	6.18 (H)	6.26 (H)	9.38 (H)	1.44 (M)
Styrene/o-Xylene	1.84 (M)	1.32 (M)	<0.02	1.73 (H)	0.37 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	0.10 (H)

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample

TABLE A17. P2OR (Continued)

Sample Date Sample ID	01/11/88 0172D	01/11/88 0173D	01/16/88 0206	01/28/88 0191	02/09/88 0242
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	0.092(M)	0.115(L)	<0.001	<0.001	0.114(L)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	1.34 (L)	1.07 (L)	1.01 (L)	4.88 (L)	1.33 (L)
Benzene/1,2-Dichloroethane	1.54 (L)	1.27 (L)	1.12 (H)	5.40 (H)	1.39 (H)
Benzene	0.20 (L)	0.20 (L)	0.11 (H)	0.52 (H)	0.06 (H)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	0.72 (H)	1.13 (H)	0.77 (M)	3.33 (L)	1.44 (L)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	0.29 (H)	0.62 (H)	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	0.33 (H)	0.47 (L)	0.94 (H)	10.64 (H)	<0.04
Styrene/o-Xylene	0.09 (M)	<0.02	0.70 (M)	2.52 (H)	<0.02
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	0.05 (L)	<0.02	0.39 (M)
p-Dichlorobenzene	<0.09	<0.09	<0.09	3.10 (H)	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample

TABLE A17. P20R (Continued)

Sample Date	02/21/88	02/21/88	03/05/88	03/05/88	03/16/88
Sample ID	0257	0257R	0265D	0266D	0291
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	3.10 (H)	2.70 (H)	2.90 (L)	3.20 (M)	2.10 (H)
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	0.226(L)	0.224(L)	<0.001	<0.001	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	3.74 (L)	3.74 (L)	1.86 (L)	1.79 (L)	<0.04
Benzene/1,2-Dichloroethane	4.20 (M)	4.20 (M)	2.05 (H)	2.01 (M)	<0.04
Benzene	0.46 (M)	0.46 (M)	0.19 (H)	0.22 (M)	<0.04
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	2.26 (H)	2.41 (H)	1.23 (L)	1.23 (M)	1.08 (L)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	1.14 (M)	1.19 (M)	0.55 (M)	0.61 (M)	0.42 (H)
Styrene/o-Xylene	0.34 (L)	0.37 (M)	0.18 (M)	0.18 (L)	0.15 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	0.33 (L)	0.40 (M)	<0.09
o-Dichlorobenzene	<0.02	<0.02	0.18 (L)	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample R Replicate analysis

TABLE A17. P20R (Continued)

Sample Date Sample ID	03/28/88 0329	04/11/88 0336	04/21/88 0358	05/03/88 0382	05/03/88 0382R
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	0.50 (M)	0.58 (M)
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	<0.001	<0.001	0.195(H)	0.178(H)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	3.09 (L)	<0.04	2.71 (L)	0.88 (L)	1.08 (L)
Benzene/1,2-Dichloroethane	3.20 (L)	<0.04	2.94 (H)	0.98 (H)	1.19 (H)
Benzene	0.11 (L)	<0.04	0.23 (H)	0.10 (H)	0.11 (H)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	1.44 (H)	2.03 (H)	6.74 (M)	1.15 (L)	1.38 (H)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	0.18 (M)	<0.02
Tetrachloroethylene	<0.07	<0.07	1.07 (H)	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	0.60 (H)	<0.02	0.11 (L)
Ethylbenzene	<0.02	1.08 (M)	1.85 (M)	0.96 (L)	0.76 (L)
m/p-Xylene	0.89 (H)	0.62 (H)	0.99 (H)	0.15 (L)	0.22 (M)
Styrene/o-Xylene	<0.02	0.40 (H)	0.94 (H)	<0.02	0.13 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	0.55 (H)	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

R Replicate analysis

TABLE A17. P20R (Continued)

Sample Date Sample ID	05/15/88 0400	05/27/88 0425	06/08/88 0437D	06/08/88 0438D	06/20/88 0462
Compound			Concentration, ppbv		
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	5.09 (M)	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	0.299(H)	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	<0.001	0.894(M)	0.963(M)	1.505(L)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	1.04 (L)	3.99 (L)	1.59 (L)	1.18 (L)	2.11 (L)
Benzene/1,2-Dichloroethane	2.87 (M)	5.44 (H)	2.59 (H)	2.21 (H)	2.99 (M)
Benzene	1.83 (M)	1.45 (M)	1.00 (H)	1.03 (H)	0.88 (M)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	2.92 (L)	6.23 (H)	4.01 (H)	4.14 (H)	3.34 (M)
n-Octane	<0.03	2.71 (H)	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	1.32 (H)	<0.02	<0.02	<0.02
Ethylbenzene	<0.02	1.22 (M)	<0.02	<0.02	<0.02
m/p-Xylene	<0.04	8.61 (H)	3.98 (L)	4.00 (L)	<0.04
Styrene/o-Xylene	<0.02	<0.02	1.16 (L)	1.00 (L)	<0.02
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	1.41 (H)	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	3.32 (H)	2.35 (H)	309.53 (H)
o-Dichlorobenzene	<0.02	2.17 (H)	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample

TABLE A17. P2OR (Continued)

Sample Date Sample ID	07/06/88 0488	07/14/88 0503	08/01/88 0539	08/08/88 0552	08/19/88 0574
Compound			Concentration, ppbv		
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	0.97 (M)	0.61 (L)
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	0.14 (L)
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	0.14 (H)	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	0.32 (H)	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	0.144(M)
1,1,1-Trichloroethane	0.603(H)	0.630(L)	0.320(L)	<0.001	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene	0.79 (M)	1.14 (H)	2.20 (H)	1.52 (H)	1.18 (H)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	1.94 (H)	1.50 (H)	2.93 (H)	2.72 (M)	2.29 (H)
n-Octane	<0.03	<0.03	0.46 (L)	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	0.22 (H)	<0.02	<0.02
Ethylbenzene	0.26 (H)	0.15 (H)	<0.02	0.16 (H)	0.52 (H)
m/p-Xylene	1.63 (H)	1.13 (H)	3.31 (H)	1.30 (H)	3.74 (H)
Styrene/o-Xylene	0.36 (H)	0.22 (H)	0.04 (H)	0.27 (H)	0.83 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

TABLE A17. P20R (Continued)

Sample Date	08/31/88	09/12/88	09/12/88	09/24/88
Sample ID	0600	0623D (a)	0624D (a)	0647
Compound	Concentration, ppbv			
Acetylene	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	0.46 (H)	2.81 (L)	3.14 (L)	0.66 (L)
Bromomethane	<0.20	<0.20	<0.20	<0.20
Chloroethane	0.13 (L)	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	4.56 (H)
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	0.19 (H)	0.25 (L)	0.53 (M)
Bromochloromethane	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	<0.001	<0.001	0.366(M)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04
Benzene	1.24 (H)	2.22 (M)	1.96 (H)	1.22 (H)
Trichloroethylene	0.403(M)	<0.004	<0.004	0.314(L)
1,2-Dichloropropane	<0.04	1.75 (L)	1.80 (M)	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04
Toluene	1.81 (H)	3.38 (M)	3.36 (M)	1.58 (M)
n-Octane	<0.03	<0.03	<0.03	0.20 (H)
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	0.14 (M)	0.18 (M)	0.17 (H)	0.03 (H)
Ethylbenzene	0.52 (H)	0.60 (M)	0.60 (H)	0.34 (M)
m/p-Xylene	3.72 (H)	4.62 (H)	4.49 (H)	2.10 (M)
Styrene/o-Xylene	0.89 (H)	0.95 (H)	0.90 (M)	0.44 (M)
Bromoform	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	2.39 (M)
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level

(a) Sampled for 15.5 hours

D Duplicate sample

TABLE A18. MULTIPLE DETECTOR SPECIATED UATMP DATA SUMMARY FOR PHMI

Sample Date	10/06/87	10/20/87	10/30/87	10/30/87	11/12/87
Sample ID	0007	0028	0038	0038R	0067
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	0.66 (L)	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	6.568(M)	<0.001	<0.001	<0.001	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	4.15 (H)
Benzene	<0.04	<0.04	<0.04	<0.04	5.46 (H)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	3.32 (M)	<0.02	2.11 (M)	3.15 (L)	1.94 (M)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	1.48 (H)	1.27 (H)	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	7.76 (L)	3.37 (M)	8.34 (M)	8.11 (H)	4.61 (M)
Styrene/o-Xylene	<0.02	<0.02	<0.02	<0.02	1.37 (L)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

R Replicate analysis

TABLE A18. PHMI (Continued)

Sample Date	11/24/87	12/07/87	12/30/87	01/22/88	02/04/88
Sample ID	0089	0114	0160	0204	0221
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	0.24 (H)	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	0.53 (L)	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	2.686(M)	<0.006	<0.006
1,1,1-Trichloroethane	1.602(M)	<0.001	<0.001	<0.001	0.264(L)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	0.65 (L)	<0.04	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	1.49 (L)	<0.04	<0.04	<0.04	<0.04
Benzene	0.84 (L)	<0.04	<0.04	<0.04	<0.04
Trichloroethylene	<0.004	<0.004	1.350(M)	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	0.55 (M)	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	<0.02	0.76 (M)	0.04 (L)	0.41 (M)	1.59 (L)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	1.46 (M)	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	0.23 (M)	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	<0.04	<0.04	0.86 (H)	0.86 (H)	2.27 (M)
Styrene/o-Xylene	<0.02	0.06 (M)	<0.02	0.15 (H)	1.01 (L)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

TABLE A18. PHMI (Continued)

Sample Date Sample ID	02/16/88 0235	02/29/88 0279	02/29/88 0279R	03/11/88 0287	03/23/88 0303
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	0.10 (M)
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	0.220(H)	0.190(L)	0.137(M)	<0.001	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	1.11 (L)	<0.04	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	1.16 (H)	<0.04	<0.04	<0.04	<0.04
Benzene	0.05 (H)	<0.04	<0.04	<0.04	<0.04
Trichloroethylene	3.012(H)	<0.004	<0.004	<0.004	1.564(H)
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	0.72 (H)	<0.02	<0.02	1.08 (L)	0.67 (H)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	0.22 (M)	0.12 (L)	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	0.22 (L)	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	0.66 (H)	0.09 (L)	0.13 (H)	0.36 (L)	<0.04
Styrene/o-Xylene	<0.02	<0.02	<0.02	0.28 (M)	<0.02
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	0.12 (H)	<0.02
p-Dichlorobenzene	1.32 (M)	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

R Replicate analysis

TABLE A18. PHMI (Continued)

Sample Date	04/04/88	04/18/88	04/18/88	04/28/88	05/10/88
Sample ID	0323	0342D	0343D	0378	0392
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	0.20 (L)	0.13 (H)	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	12.975(H)	<0.006	<0.006	3.409(M)	<0.006
1,1,1-Trichloroethane	1.082(H)	0.767(M)	1.478(L)	3.761(H)	1.452(L)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	2.61 (L)	<0.04	<0.04	1.11 (L)	6.09 (L)
Benzene/1,2-Dichloroethane	2.89 (H)	<0.04	<0.04	1.25 (M)	6.17 (L)
Benzene	0.28 (H)	<0.04	<0.04	0.14 (M)	0.08 (L)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	<0.02	0.21 (H)	0.18 (L)	0.65 (L)	0.96 (H)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	<0.02	0.21 (H)
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	0.62 (L)
m/p-Xylene	0.20 (L)	0.04 (H)	0.05 (H)	0.11 (L)	0.13 (L)
Styrene/o-Xylene	0.18 (M)	0.30 (L)	0.03 (H)	0.08 (L)	0.14 (L)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	0.10 (L)	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample

TABLE A18. PHMI (Continued)

Sample Date	05/10/88	05/23/88	06/03/88	06/16/88	07/08/88
Sample ID	0392R	0408	0428	0452	0500
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	2.22 (H)	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	0.471(H)	<0.006	1.138(M)	<0.006
1,1,1-Trichloroethane	1.442(M)	5.670(H)	2.356(H)	4.536(H)	1.156(H)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	2.34 (L)	1.38 (L)	0.82 (L)	0.49 (L)	<0.04
Benzene/1,2-Dichloroethane	2.42 (L)	3.14 (H)	1.18 (M)	1.28 (M)	<0.04
Benzene	0.08 (L)	1.76 (H)	0.36 (M)	0.79 (M)	0.51 (H)
Trichloroethylene	<0.004	<0.004	<0.004	1.594(H)	1.767(H)
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	0.779(M)	7.50 (H)	<0.02	9.86 (M)	1.21 (H)
n-Octane	<0.03	1.15 (H)	<0.03	1.24 (M)	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	0.18 (L)	0.64 (H)	<0.02	<0.02	<0.02
Ethylbenzene	0.89 (H)	0.68 (M)	<0.02	1.06 (M)	<0.02
m/p-Xylene	0.22 (L)	3.49 (L)	<0.04	5.12 (H)	0.69 (H)
Styrene/o-Xylene	0.18 (H)	1.12 (L)	<0.02	2.13 (H)	<0.02
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

R Replicate analysis

TABLE A18. PHMI (Continued)

Sample Date	07/20/88	07/20/88	08/01/88	08/01/88	08/13/88
Sample ID	0513D	0514D	0540D	0541D	0567
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	23.85 (L)	19.42 (L)	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	2.735(L)	2.498(H)	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	0.617(L)	0.615(H)	0.704(L)	0.804(L)	<0.001
Carbon tetrachloride	<0.001	<0.001	0.346(L)	0.346(L)	<0.001
1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene	0.62 (H)	0.60 (H)	2.06 (H)	2.09 (H)	0.95 (H)
Trichloroethylene	<0.004	<0.004	0.438(M)	0.735(H)	0.424(M)
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	1.81 (H)	1.83 (H)	4.41 (M)	4.53 (H)	2.13 (L)
n-Octane	<0.03	<0.03	0.08 (M)	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	0.27 (H)	0.25 (H)	0.39 (H)	0.37 (H)	0.23 (H)
m/p-Xylene	1.60 (H)	1.61 (H)	1.97 (H)	2.01 (H)	1.46 (H)
Styrene/o-Xylene	0.34 (H)	0.31 (H)	0.39 (H)	0.41 (H)	0.34 (M)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample

TABLE A18. PHMI (Continued)

Sample Date Sample ID	08/25/88 0588	09/07/88 0610	09/19/88 0631	09/19/88 0631R
Compound		Concentration, ppbv		
Acetylene	<1.00	8.96 (L)	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	0.20 (H)	0.30 (M)	0.28 (H)
Bromomethane	<0.20	<0.20	<0.20	<0.20
Chloroethane	0.42 (L)	3.30 (L)	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	0.28 (H)	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	0.906(M)	0.640(L)	6.254(M)	6.628(M)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04
Benzene	0.33 (M)	1.22 (H)	2.79 (H)	2.70 (H)
Trichloroethylene	0.305(H)	0.370(L)	0.706(H)	0.694(M)
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04
Toluene	0.33 (H)	1.72 (H)	12.64 (H)	13.33 (L)
n-Octane	<0.03	0.13 (L)	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	0.17 (M)	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	0.07 (L)	0.23 (H)	0.43 (M)	0.43 (M)
m/p-Xylene	0.22 (H)	1.40 (H)	2.43 (M)	2.45 (H)
Styrene/o-Xylene	<0.02	0.40 (M)	0.58 (M)	0.62 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level

R Replicate analysis

TABLE A19. MULTIPLE DETECTOR SPECIATED UATMP DATA SUMMARY FOR SAIL

Sample Date Sample ID	09/24/87 0022	10/06/87 0008	10/18/87 0026	10/30/87 0040	10/30/87 0040R
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	0.42 (H)	<0.06	<0.06	0.34 (L)	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	0.050 (H)	<0.001	<0.001	<0.001	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	0.55 (L)	4.73 (L)	0.43 (L)	<0.04	<0.04
Benzene/1,2-Dichloroethane	2.41 (M)	30.04 (M)	2.87 (L)	<0.04	<0.04
Benzene	1.86 (M)	25.31 (M)	2.44 (L)	<0.04	<0.04
Trichloroethylene	<0.004	6.350(H)	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	2.34 (H)	1.41 (H)	2.05 (L)	2.15 (M)	2.72 (L)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	4.96 (H)	<0.02	<0.02	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	15.83 (M)	24.14 (H)	5.01 (H)	6.09 (L)	4.83 (H)
Styrene/o-Xylene	<0.02	3.81 (M)	<0.02	<0.02	<0.02
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	4.91 (M)	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

R Replicate analysis

TABLE A19. SAIL (Continued)

Sample Date	11/11/87	11/23/87	11/23/87	12/05/87	12/15/87
Sample ID	0069	0087D	0088D	0115	0146
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	5.008(H)
1,1,1-Trichloroethane	<0.001	6.861(H)	7.018(H)	<0.001	<0.001
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	0.29 (L)	6.52 (L)	6.41 (L)	<0.04	<0.04
Benzene/1,2-Dichloroethane	3.21 (H)	21.70 (M)	22.07 (M)	<0.04	<0.04
Benzene	2.92 (H)	15.18 (M)	15.66 (M)	<0.04	<0.04
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	0.94 (M)	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	1.61 (M)	<0.04	0.34 (M)
Toluene	1.62 (H)	2.82 (H)	2.73 (H)	1.06 (M)	0.88 (H)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	0.70 (M)
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	0.34 (M)
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	<0.02	0.06 (M)	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	6.23 (H)	8.53 (H)	8.73 (H)	1.94 (H)	3.68 (H)
Styrene/o-Xylene	1.34 (L)	1.32 (M)	<0.02	0.45 (H)	0.84 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample

TABLE A19. SAIL (Continued)

Sample Date	12/31/87	01/10/88	01/22/88	02/03/88	02/15/88
Sample ID	0186	0183	0192	0230	0237
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	0.27 (M)	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	<0.001	<0.001	0.033(M)	<0.001	0.118(L)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene	<0.04	<0.04	<0.04	<0.04	<0.04
Trichloroethylene	<0.004	<0.004	1.524(M)	<0.004	<0.004
1,2-Dichloropropane	1.01 (H)	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	0.09 (H)	<0.04	<0.04	<0.04
Toluene	0.41 (H)	<0.02	0.67 (M)	0.67 (M)	0.36 (L)
n-Octane	<0.03	<0.03	<0.03	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	0.73 (M)	<0.02
Tetrachloroethylene	0.42 (M)	<0.07	<0.07	<0.07	0.07 (M)
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	<0.02	<0.02	0.25 (M)	0.14 (M)	0.25 (H)
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	1.13 (H)	0.55 (H)	2.52 (H)	1.28 (H)	6.68 (H)
Styrene/o-Xylene	0.20 (H)	0.09 (H)	0.58 (M)	0.28 (H)	0.80 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	0.10 (L)	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	2.11 (M)	0.79 (L)
o-Dichlorobenzene	2.77 (M)	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

TABLE A19. SAIL (Continued)

Sample Date Sample ID	02/15/88 0237R	02/27/88 0268	03/10/88 0286 (a)	03/30/88 0326	04/09/88 0341
Compound			Concentration, ppbv		
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	0.377(M)	<0.001	0.033(M)	0.033(M)	0.187(H)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	<0.04	5.78 (L)	1.13 (L)
Benzene/1,2-Dichloroethane	<0.04	<0.04	<0.04	6.20 (H)	1.34 (H)
Benzene	<0.04	<0.04	<0.04	0.42 (H)	0.21 (H)
Trichloroethylene	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	0.12 (M)	<0.04	<0.04	<0.04	<0.04
Toluene	0.41 (M)	0.62 (L)	0.41 (H)	1.59 (H)	0.62 (L)
n-Octane	<0.03	<0.03	0.08 (H)	0.41 (M)	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	0.19 (H)	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	0.06 (L)	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	0.29 (M)	0.14 (M)	<0.02	<0.02	<0.02
Ethylbenzene	<0.02	<0.02	<0.02	<0.02	<0.02
m/p-Xylene	6.79 (H)	1.28 (H)	0.10 (H)	0.94 (M)	0.19 (H)
Styrene/o-Xylene	0.92 (H)	0.31 (H)	<0.02	<0.02	0.09 (L)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	0.79 (H)	0.66 (L)	<0.09	<0.09	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

(a) Sampled for 30 hours

R Replicate analysis

TABLE A19. SAIL (Continued)

Sample Date	04/15/88	04/27/88	05/09/88	05/24/88	05/24/88
Sample ID	0348	0375	0393	0411	0411R
Compound	Concentration, ppbv				
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	0.31 (M)	<0.04	<0.04	0.21 (M)
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	0.290(M)
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	1.026(L)	1.332(H)	3.419(H)	<0.001	0.789(M)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	1.28 (L)	2.72 (L)	1.97 (L)
Benzene/1,2-Dichloroethane	<0.04	<0.04	1.43 (H)	4.42 (H)	3.70 (H)
Benzene	<0.04	<0.04	0.15 (H)	1.70 (H)	1.73 (H)
Trichloroethylene	<0.004	<0.004	2.018(M)	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	0.31 (L)
Toluene	1.83 (M)	0.76 (M)	0.77 (L)	3.25 (H)	2.92 (H)
n-Octane	1.25 (H)	<0.03	<0.03	2.52 (H)	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	1.14 (M)	0.25 (M)	<0.02	0.95 (H)	0.82 (L)
Ethylbenzene	4.49 (H)	3.55 (H)	<0.02	<0.02	0.48 (L)
m/p-Xylene	3.45 (H)	2.91 (H)	0.58 (L)	2.93 (M)	2.38 (L)
Styrene/o-Xylene	1.51 (M)	0.90 (H)	0.15 (L)	0.75 (L)	0.79 (L)
Bromoform	<0.001	<0.001	0.021(H)	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	0.013(M)	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	0.49 (H)	0.24 (L)
p-Dichlorobenzene	8.15 (H)	1.30 (H)	2.17 (L)	6.64 (M)	9.44 (M)
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

R Replicate analysis

TABLE A19. SAIL (Continued)

Sample Date Sample ID	06/02/88 0433D	06/02/88 0434D	06/15/88 0454	06/28/88 0477	07/08/88 0497
Compound			Concentration, ppbv		
Acetylene	<1.00	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	2.64 (H)	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	2.319(L)	2.246(H)	<0.001	0.722(H)	0.824 (H)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	3.39 (L)	4.52 (L)	10.61 (L)	0.43 (L)	<0.04
Benzene/1,2-Dichloroethane	9.48 (H)	12.30 (M)	24.78 (H)	0.80 (H)	<0.04
Benzene	6.09 (H)	7.78 (M)	14.17 (H)	0.37 (H)	1.07 (L)
Trichloroethylene	<0.004	<0.004	3.500(H)	<0.004	<0.004
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	3.58 (H)	7.50 (H)	95.11 (M)	1.65 (H)	3.93 (H)
n-Octane	0.79 (H)	0.43 (M)	1.80 (H)	<0.03	<0.03
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	0.41 (L)	0.39 (H)	0.11 (H)	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	1.97 (H)	1.59 (M)	1.97 (M)	<0.02	0.36 (H)
Ethylbenzene	2.26 (H)	2.31 (M)	8.32 (H)	0.16 (H)	0.53 (H)
m/p-Xylene	11.81 (H)	18.88 (H)	57.36 (H)	0.81 (H)	3.07 (H)
Styrene/o-Xylene	2.76 (H)	3.58 (L)	22.87 (H)	<0.02	0.72 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	1.02 (H)	0.92 (L)	<0.02	<0.02	<0.02
p-Dichlorobenzene	<0.09	<0.09	<0.09	<0.09	<0.09
o-Dichlorobenzene	4.75 (L)	3.77 (M)	1.53 (L)	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample

TABLE A19. SAIL (Continued)

Sample Date Sample ID	07/20/88 0524	08/02/88 0538	08/13/88 0572	08/25/88 0589	09/13/88 0628D
Compound			Concentration, ppbv		
Acetylene	<1.00	3.37 (L)	5.75 (L)	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	<0.10	<0.10	<0.10	0.44 (M)	0.29 (M)
Bromomethane	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	0.40 (L)	0.55 (L)	1.59 (L)	<0.10
Methylene chloride	<0.11	2.93 (L)	<0.11	<0.11	<0.11
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Chloroprene	<0.06	<0.06	0.96 (L)	0.11 (M)	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	<0.006	<0.006
1,1,1-Trichloroethane	3.906(H)	<0.001	0.398(H)	8.995(L)	1.583(H)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04	<0.04
Benzene	2.20 (H)	0.33 (H)	0.63 (L)	1.27 (H)	7.05 (H)
Trichloroethylene	1.45 (H)	<0.004	<0.004	0.538(M)	0.282(L)
1,2-Dichloropropane	<0.04	<0.04	0.03 (L)	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
Toluene	2.07 (L)	0.98 (L)	0.87 (L)	2.19 (H)	2.89 (L)
n-Octane	<0.03	<0.03	<0.03	0.22 (H)	0.04 (L)
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	<0.07	<0.07
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	1.73 (H)	<0.02	0.56 (H)	0.28 (H)	3.78 (M)
Ethylbenzene	5.40 (H)	<0.02	0.34 (H)	0.55 (H)	2.94 (M)
m/p-Xylene	33.20 (H)	0.54 (H)	1.59 (H)	3.39 (H)	19.44 (M)
Styrene/o-Xylene	4.79 (H)	<0.02	0.37 (M)	0.78 (H)	3.31 (M)
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02
p-Dichlorobenzene	14.21 (H)	<0.09	5.08 (L)	7.16 (M)	28.62 (M)
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level (Continued)

D Duplicate sample

TABLE A19. SAIL (Continued)

Sample Date	09/13/88	09/13/88	09/13/88	09/20/88
Sample ID	0628R	0629D	0629R	0643
Compound	Concentration, ppbv			
Acetylene	<1.00	<1.00	<1.00	<1.00
Propylene	<0.10	<0.10	<0.10	<0.10
Chloromethane	<0.20	<0.20	<0.20	<0.20
Vinyl chloride	<0.20	<0.20	<0.20	<0.20
1,3-Butadiene	0.36 (L)	0.24 (H)	0.27 (H)	<0.10
Bromomethane	<0.20	<0.20	<0.20	<0.20
Chloroethane	<0.10	<0.10	<0.10	<0.10
Methylene chloride	<0.11	<0.11	<0.11	1.05 (M)
trans-1,2-Dichloroethylene	<0.04	<0.04	<0.04	<0.04
1,1-Dichloroethane	<0.04	<0.04	<0.04	0.06 (L)
Chloroprene	<0.06	<0.06	<0.06	<0.06
Bromochloromethane	<0.003	<0.003	<0.003	<0.003
Chloroform	<0.006	<0.006	<0.006	38.743(H)
1,1,1-Trichloroethane	1.537(H)	1.593(H)	1.613(H)	0.727(L)
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001
1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04
Benzene/1,2-Dichloroethane	<0.04	<0.04	<0.04	<0.04
Benzene	6.82 (M)	7.03 (H)	7.18 (H)	3.23 (H)
Trichloroethylene	0.256(L)	0.286(L)	0.428(M)	2.908(M)
1,2-Dichloropropane	<0.04	<0.04	<0.04	<0.04
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001
cis-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04
Toluene	2.79 (H)	2.68 (L)	2.79 (L)	2.35 (H)
n-Octane	0.04 (M)	0.07 (H)	0.03 (L)	0.12 (H)
n-Octane/t-1,3-Dichloropropylene	<0.03	<0.03	<0.03	<0.03
trans-1,3-Dichloropropylene	<0.04	<0.04	<0.04	<0.04
1,1,2-Trichloroethane	<0.02	<0.02	<0.02	<0.02
Tetrachloroethylene	<0.07	<0.07	<0.07	0.20 (L)
Dibromochloromethane	<0.001	<0.001	<0.001	<0.001
Chlorobenzene	3.73 (M)	3.70 (H)	4.69 (L)	0.64 (M)
Ethylbenzene	2.87 (M)	2.89 (H)	3.30 (L)	0.34 (H)
m/p-Xylene	18.69 (M)	19.05 (H)	20.58 (H)	2.28 (H)
Styrene/o-Xylene	3.13 (M)	3.15 (M)	3.27 (H)	0.50 (H)
Bromoform	<0.001	<0.001	<0.001	<0.001
1,1,2,2-Tetrachloroethane	<0.002	<0.002	<0.002	<0.002
m-Dichlorobenzene	0.06 (L)	<0.02	<0.02	<0.02
p-Dichlorobenzene	27.66 (L)	28.24 (M)	27.75 (L)	<0.09
o-Dichlorobenzene	<0.02	<0.02	<0.02	<0.02

(H) High confidence level (M) Medium confidence level (L) Low confidence level

D Duplicate sample R Replicate analysis

APPENDIX B

BENZENE, TOLUENE, AND M/P-XYLENE CONCENTRATIONS AT 1988 UATMP SITES

APPENDIX B

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BENZENE, TOLUENE, AND M/P–XYLENE CONCENTRATIONS

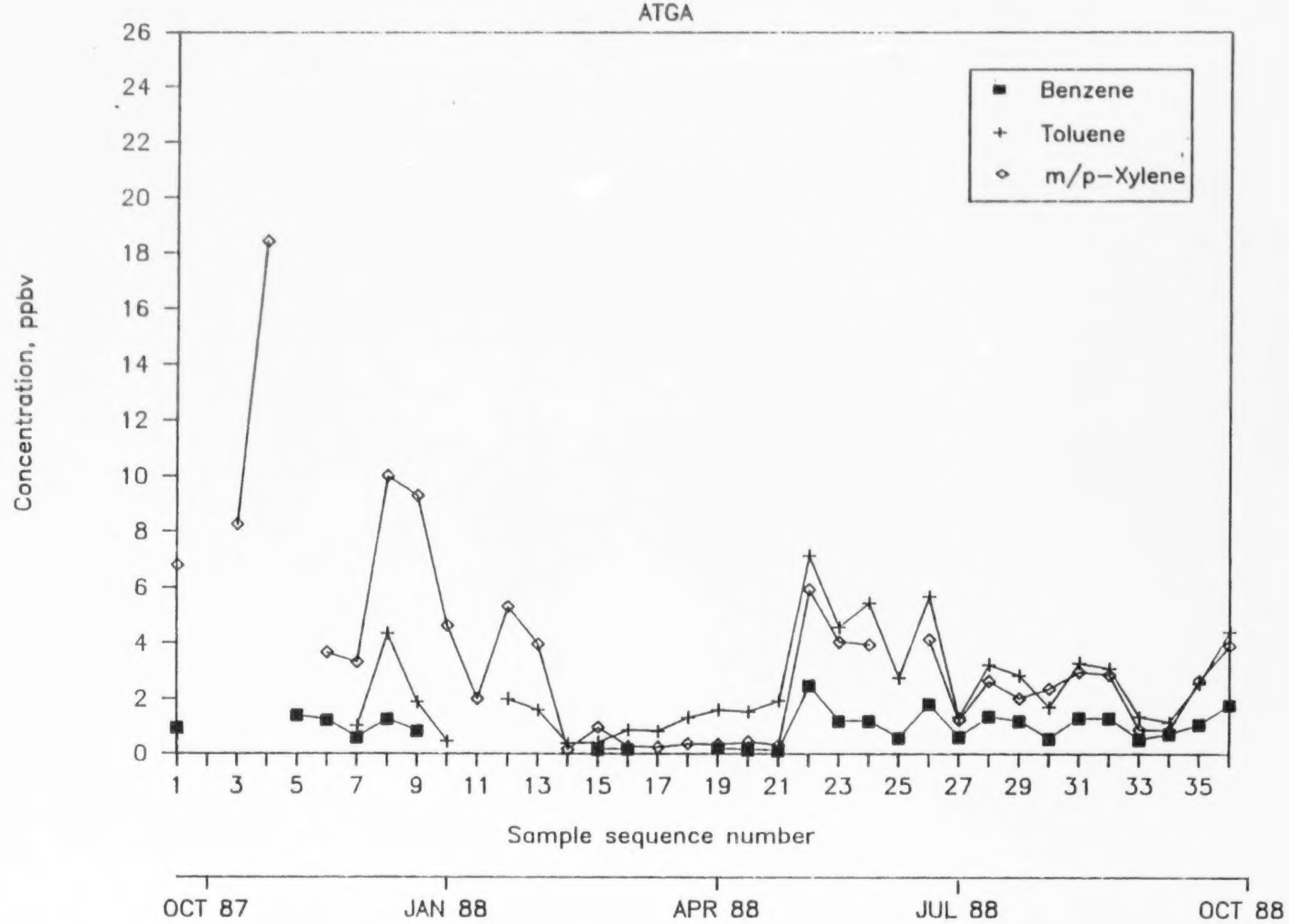

Figure B–1. Benzene, toluene, and m/p–xylene concentration in ATGA 1988 UATMP samples.

BENZENE, TOLUENE, AND M/P–XYLENE CONCENTRATIONS

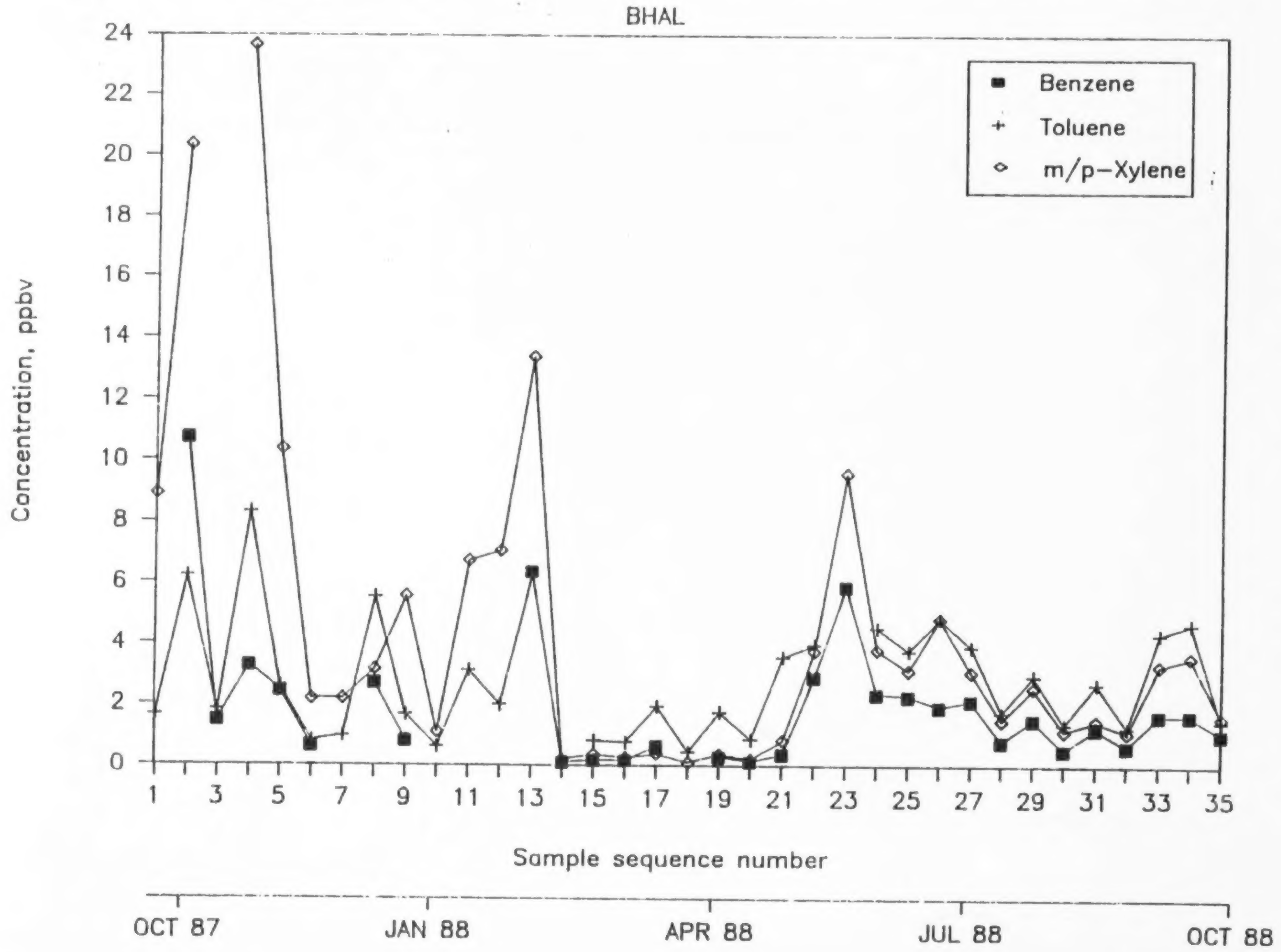

Figure B–2. Benzene, toluene, and m/p–xylene concentration in BHAL 1988 UATMP samples.

BENZENE, TOLUENE, AND M/P–XYLENE CONCENTRATIONS

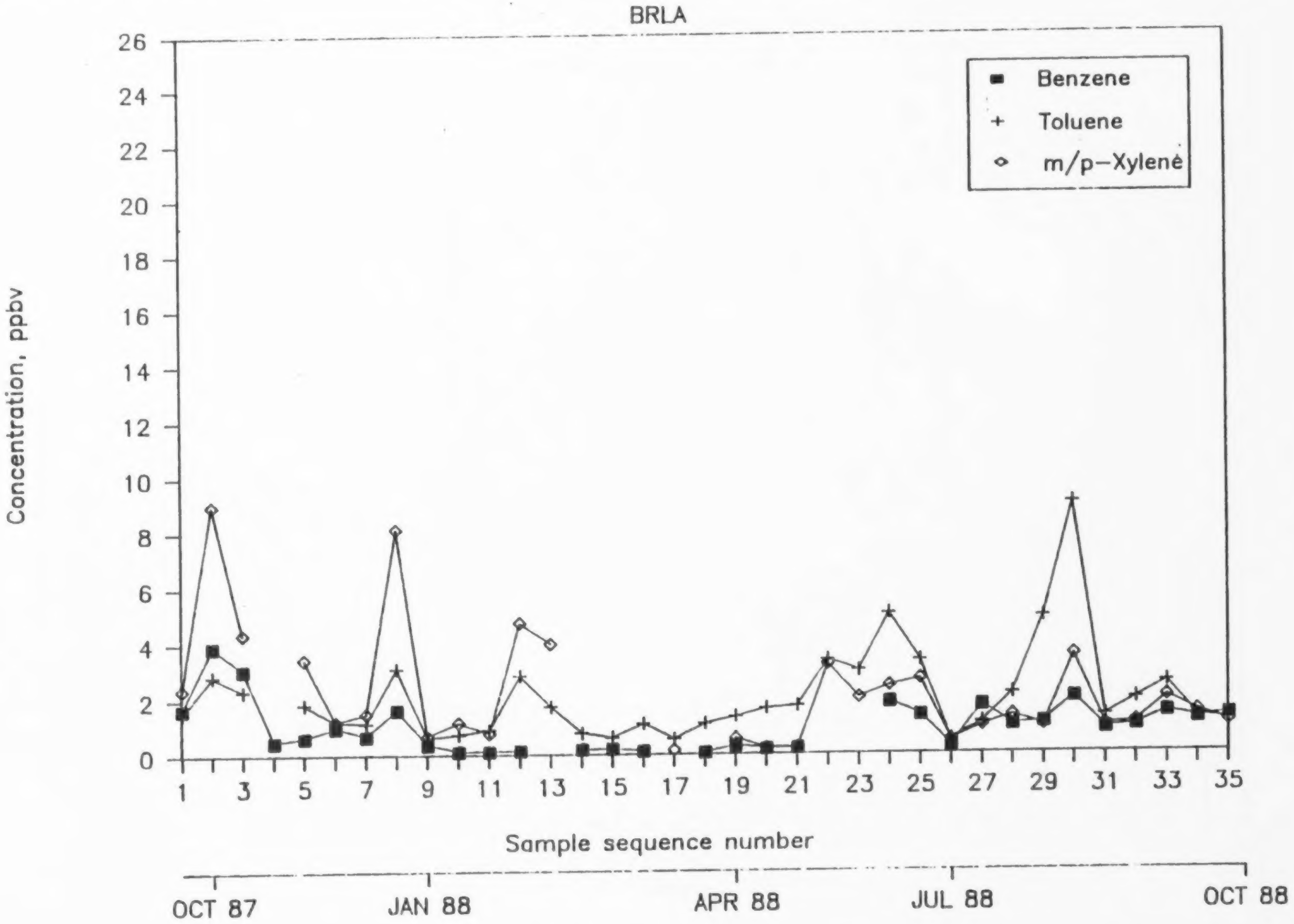

Figure B–3. Benzene, toluene, and m/p–xylene concentration in BRLA 1988 UATMP samples.

BENZENE, TOLUENE, AND M/P–XYLENE CONCENTRATIONS

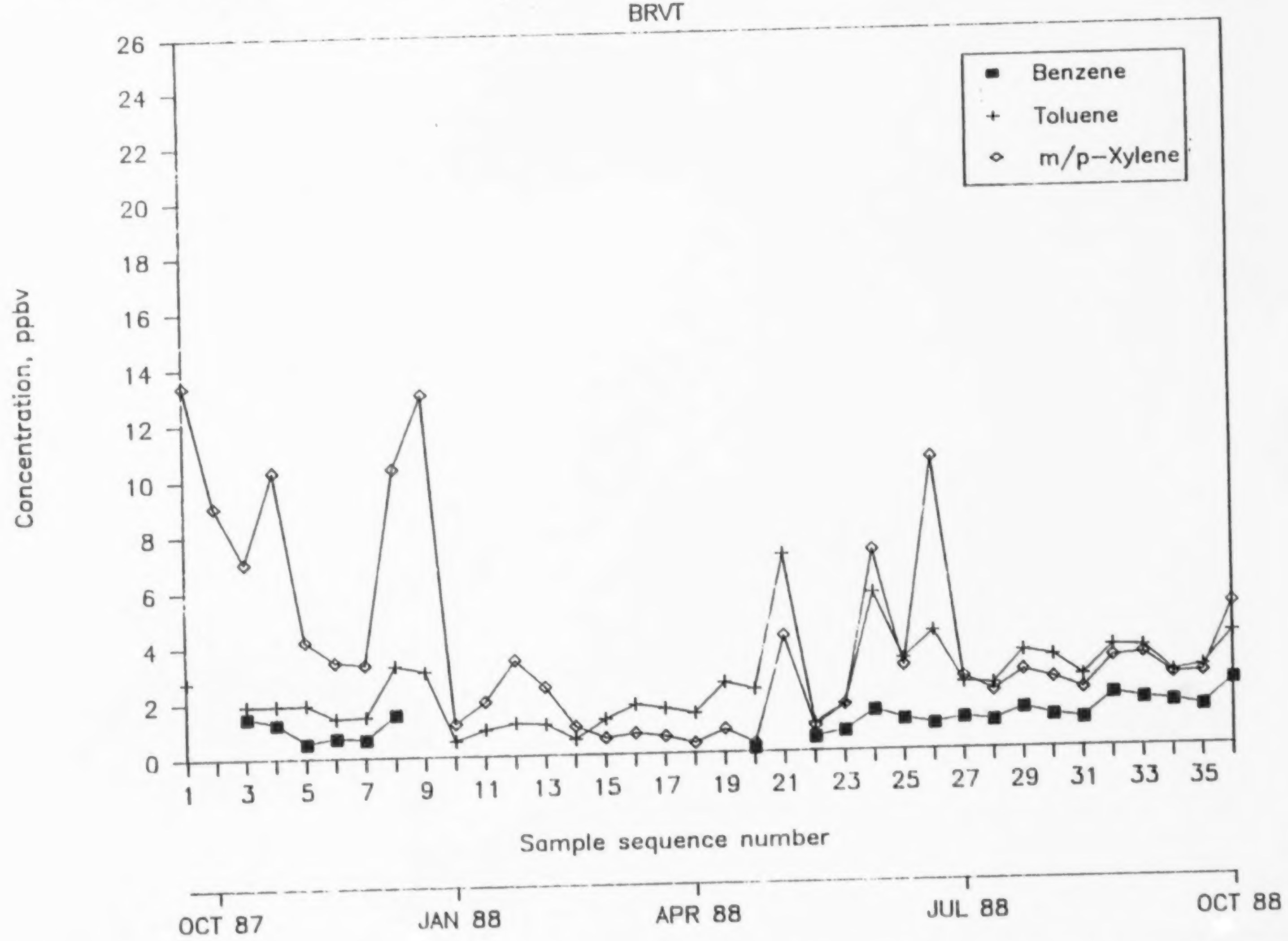

Figure B–4. Benzene, toluene, and m/p–xylene concentration in BRVT 1988 UATMP samples.

BENZENE, TOLUENE, AND M/P-XYLENE CONCENTRATIONS

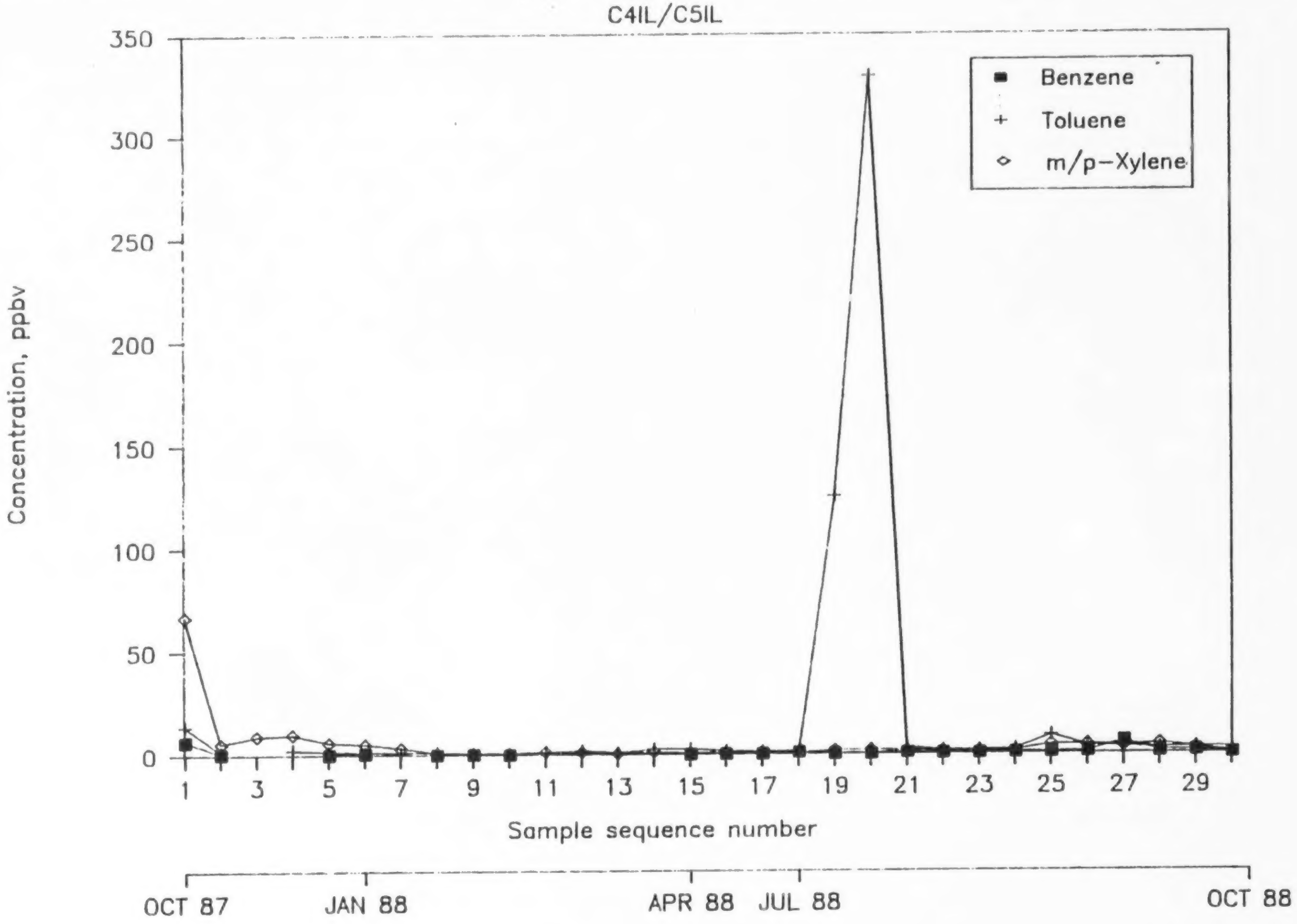

Figure B-5. Benzene, toluene, and m/p-xylene concentration in C4IL/C5IL 1988 UATMP samples.

BENZENE, TOLUENE, AND M/P–XYLENE CONCENTRATIONS

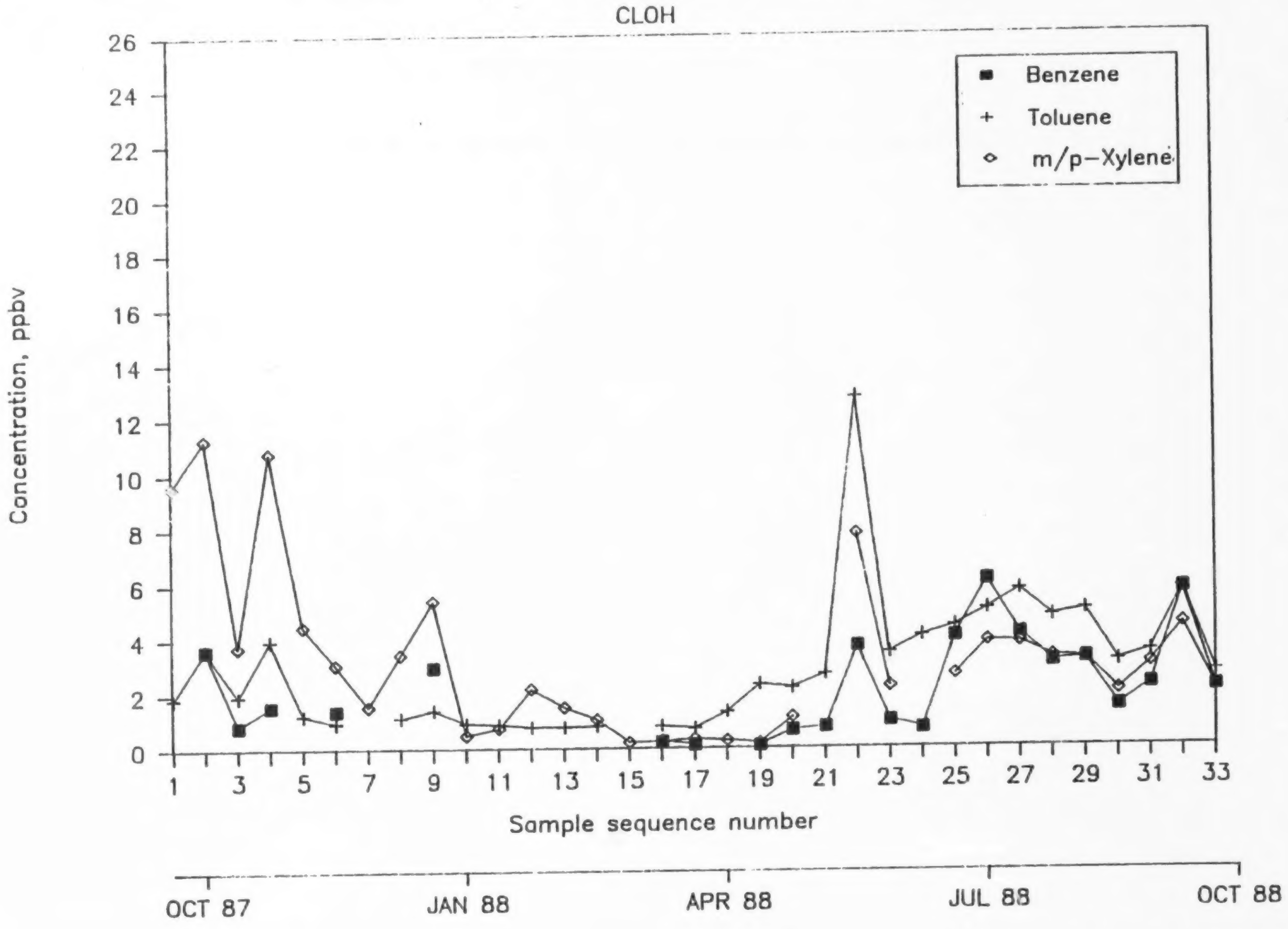

Figure B–6. Benzene, toluene, and m/p–xylene concentration in CLOH 1988 UATMP samples.

BENZENE, TOLUENE, AND M/P−XYLENE CONCENTRATIONS

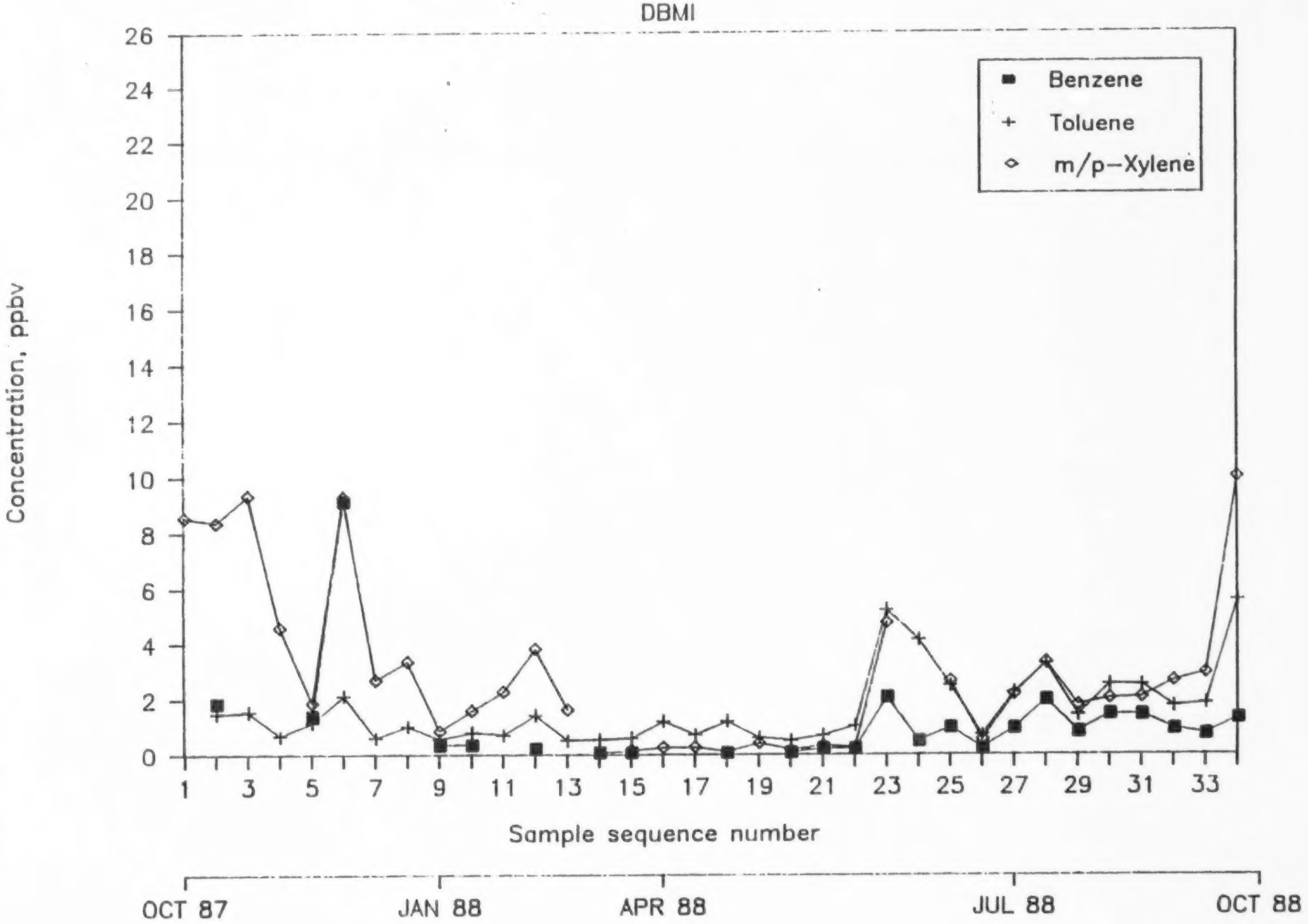

Figure B−7. Benzene, toluene, and m/p−xylene concentration in DBMI 1988 UATMP samples.

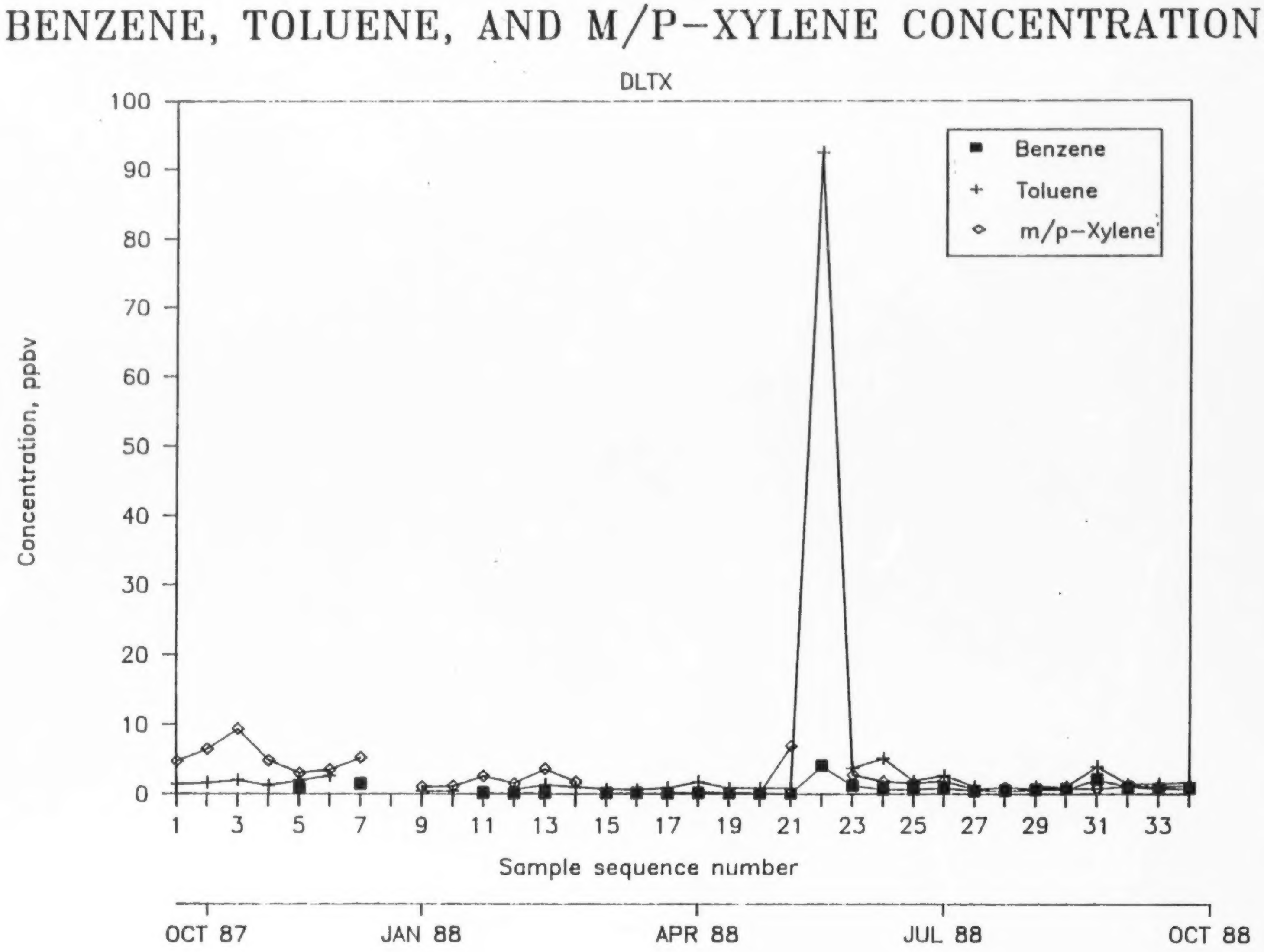

Figure B–8. Benzene, toluene, and m/p–xylene concentration in DLTX 1988 UATMP samples.

BENZENE, TOLUENE, AND M/P-XYLENE CONCENTRATIONS

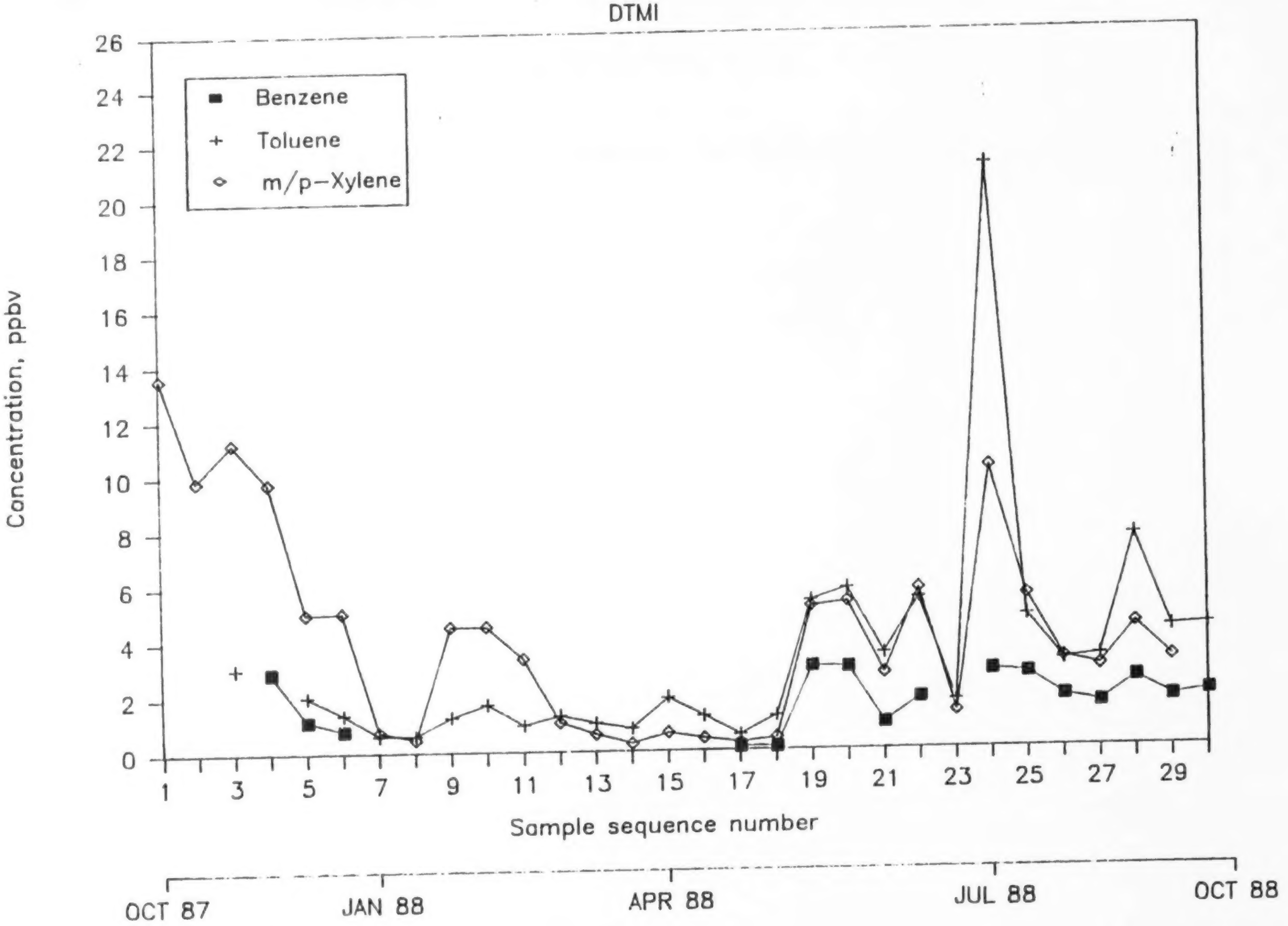

Figure B-9. Benzene, toluene, and m/p-xylene concentration in DTMI 1988 UATMP samples.

BENZENE, TOLUENE, AND M/P-XYLENE CONCENTRATIONS

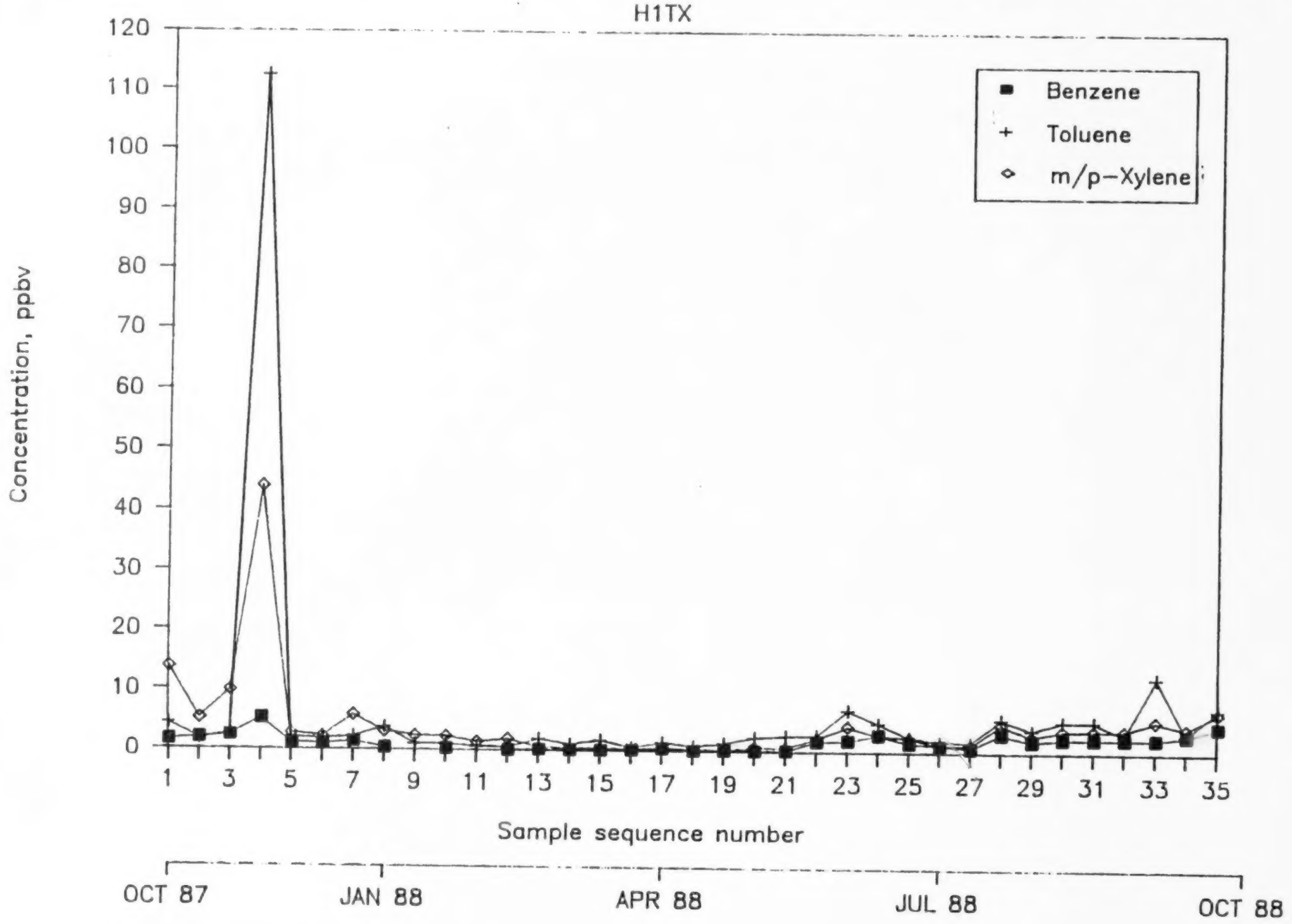

Figure B-10. Benzene, toluene, and m/p-xylene concentration in H1TX 1988 UATMP samples.

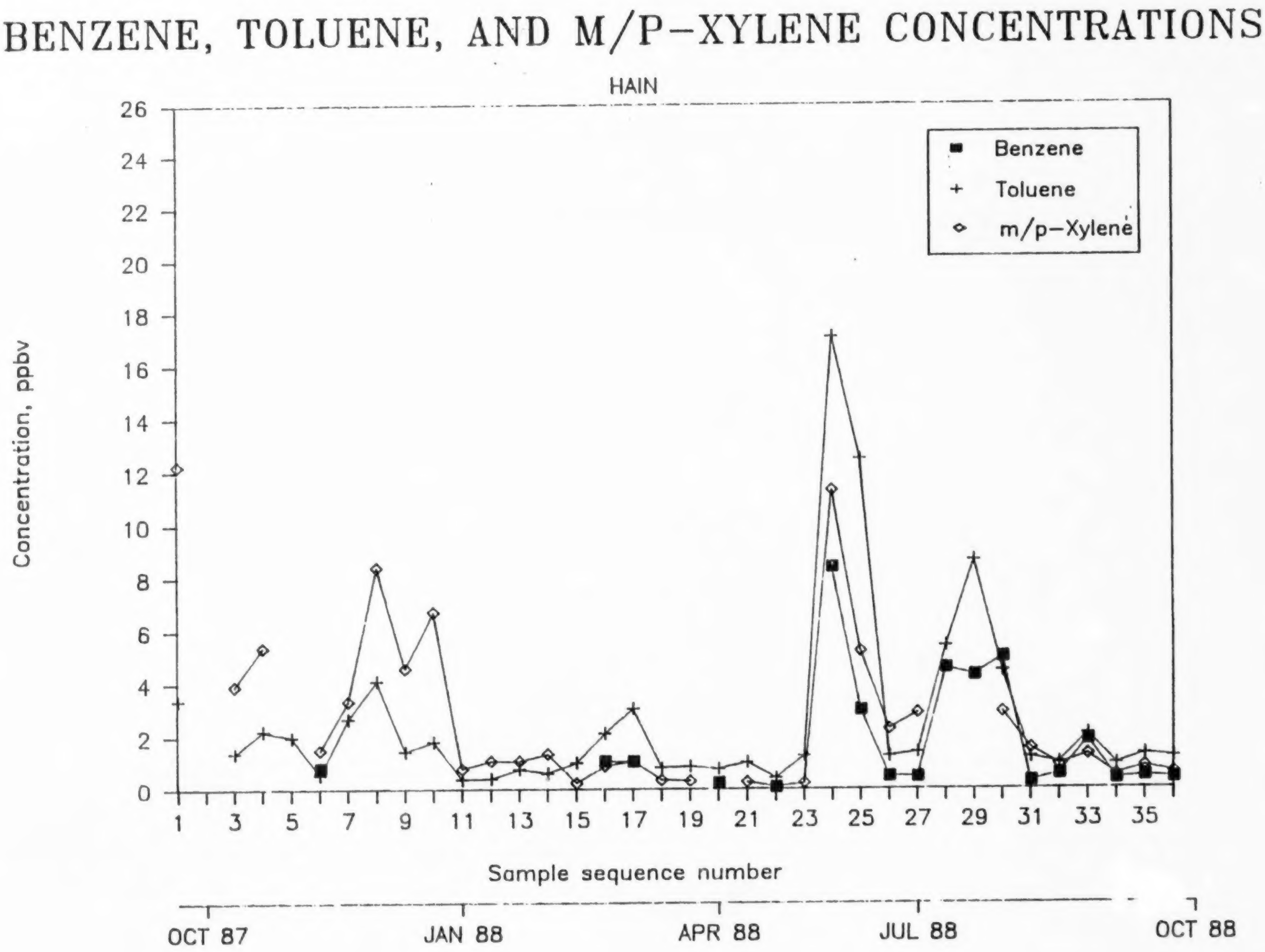

Figure B-11. Benzene, toluene, and m/p-xylene concentration in HAIN 1988 UATMP samples.

BENZENE, TOLUENE, AND M/P-XYLENE CONCENTRATIONS

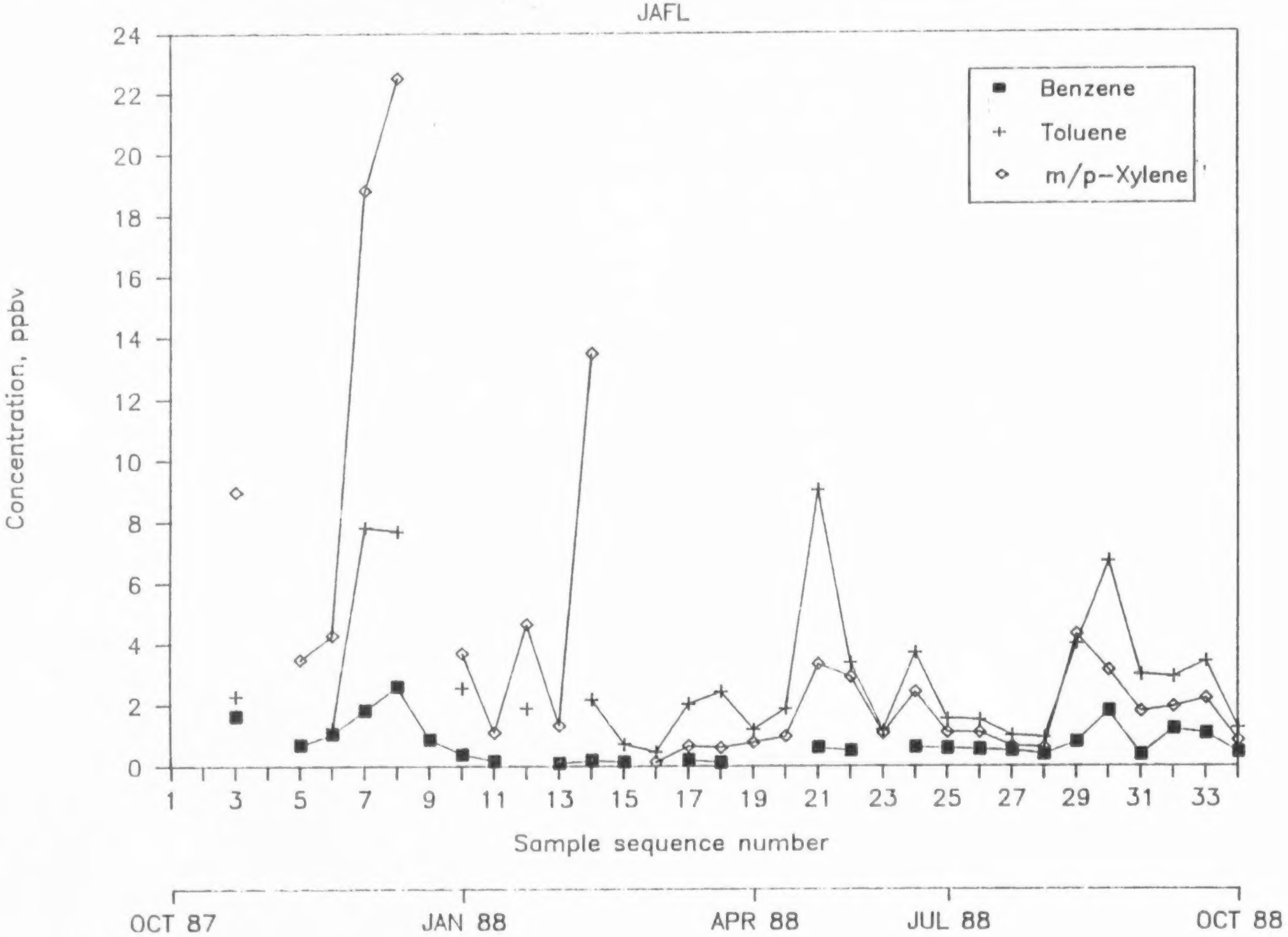

Figure B-12. Benzene, toluene, and m/p-xylene concentration in JAFL 1988 UATMP samples.

BENZENE, TOLUENE, AND M/P–XYLENE CONCENTRATIONS

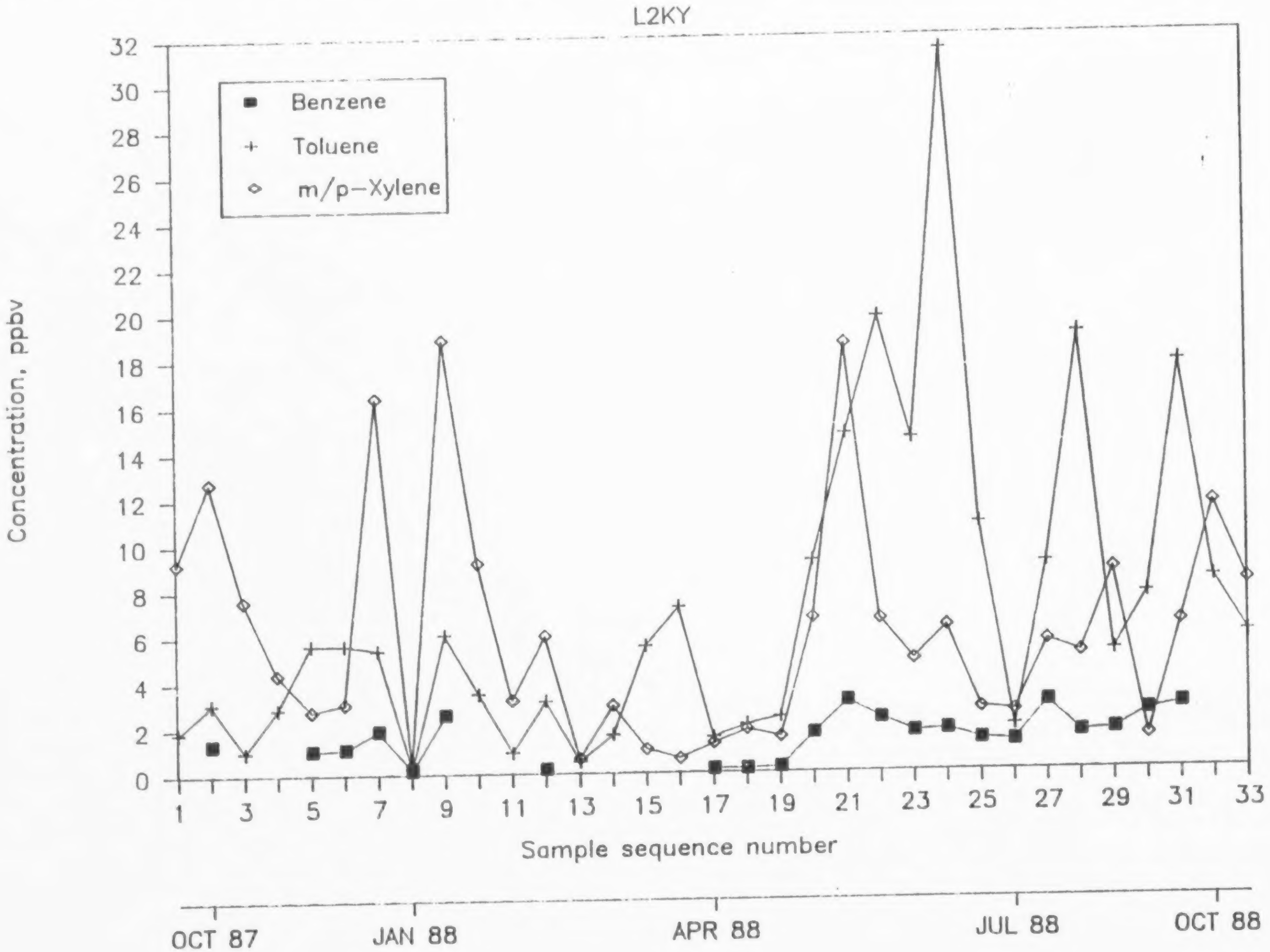

Figure B–13. Benzene, toluene, and m/p–xylene concentration in L2KY 1988 UATMP samples.

BENZENE, TOLUENE, AND M/P–XYLENE CONCENTRATIONS

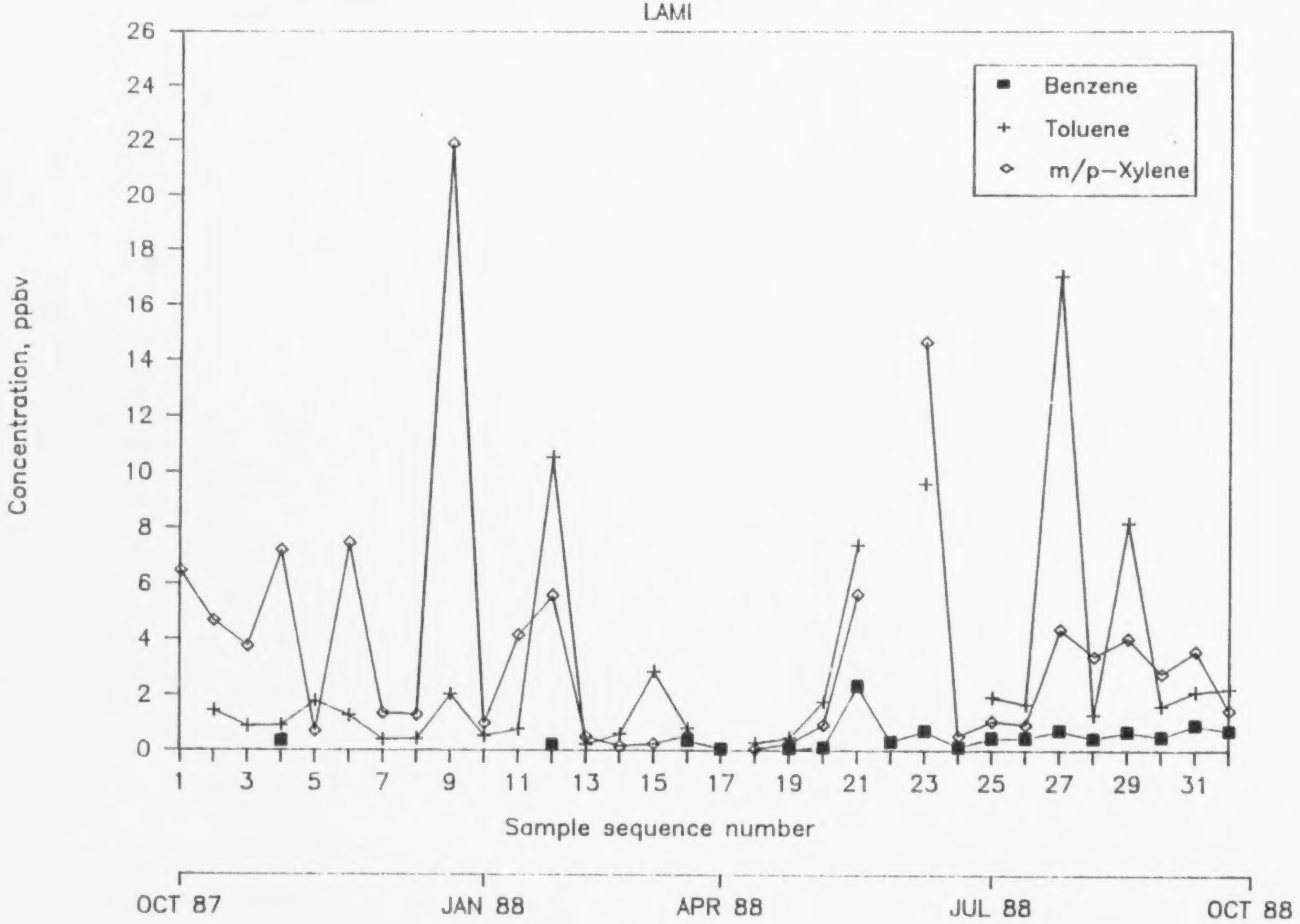

Figure B–14. Benzene, toluene, and m/p–xylene concentration in LAMI 1988 UATMP samples.

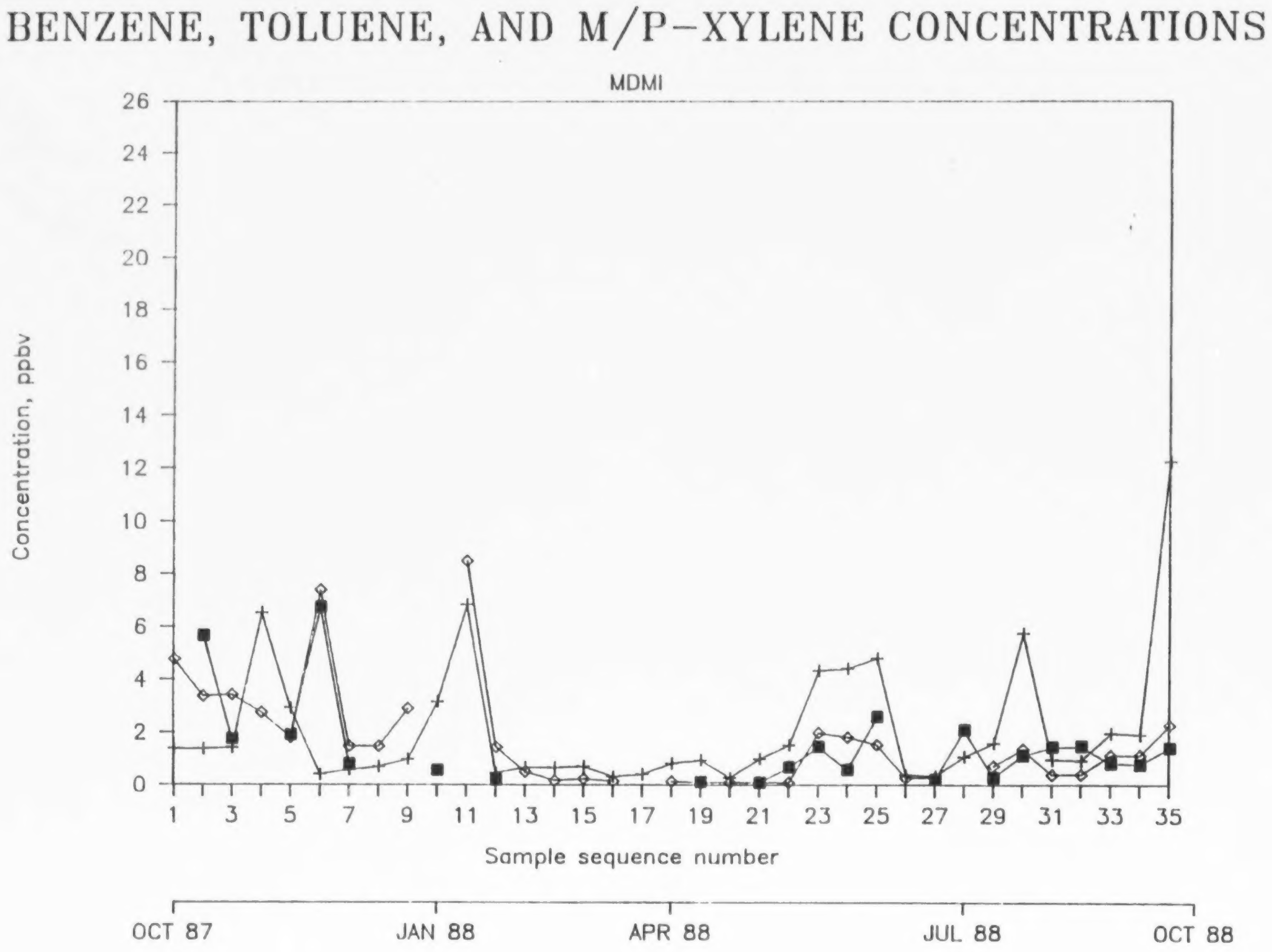

Figure B-15. Benzene, toluene, and m/p-xylene concentration in MDMI 1988 UATMP samples.

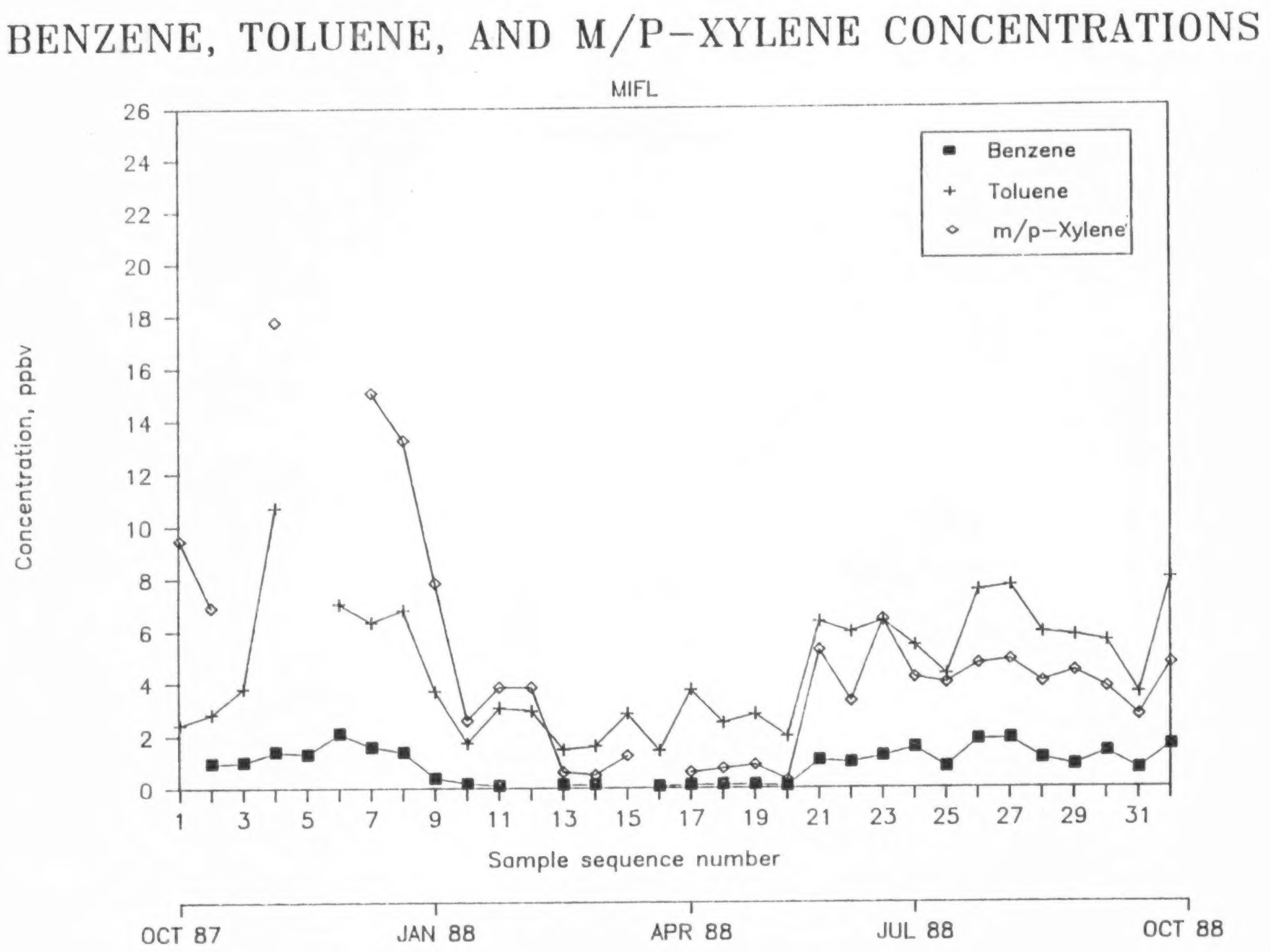

Figure B–16. Benzene, toluene, and m/p–xylene concentration in MIFL 1988 UATMP samples.

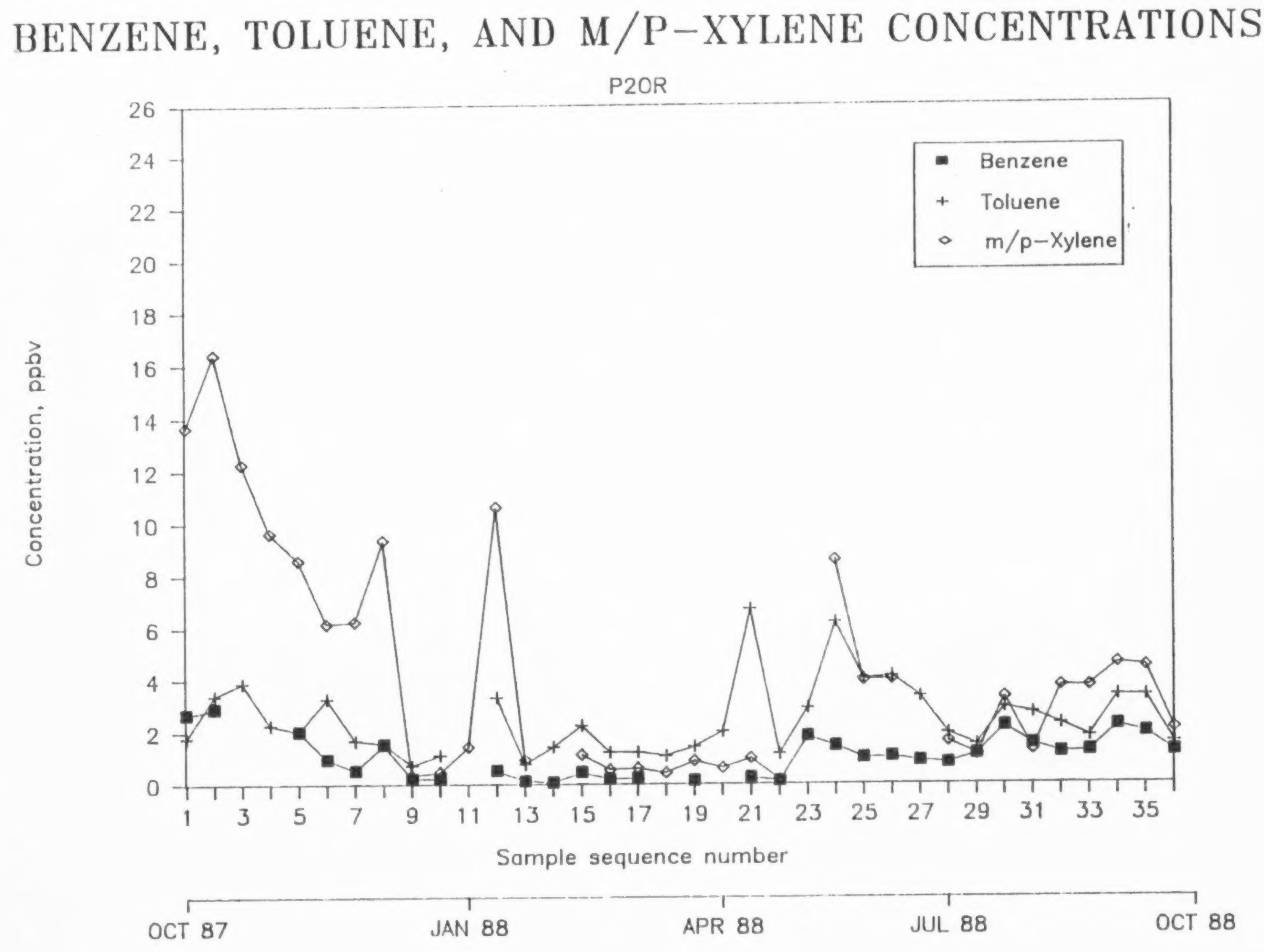

Figure B-17. Benzene, toluene, and m/p-xylene concentration in P20R 1988 UATMP samples.

BENZENE, TOLUENE, AND M/P–XYLENE CONCENTRATIONS

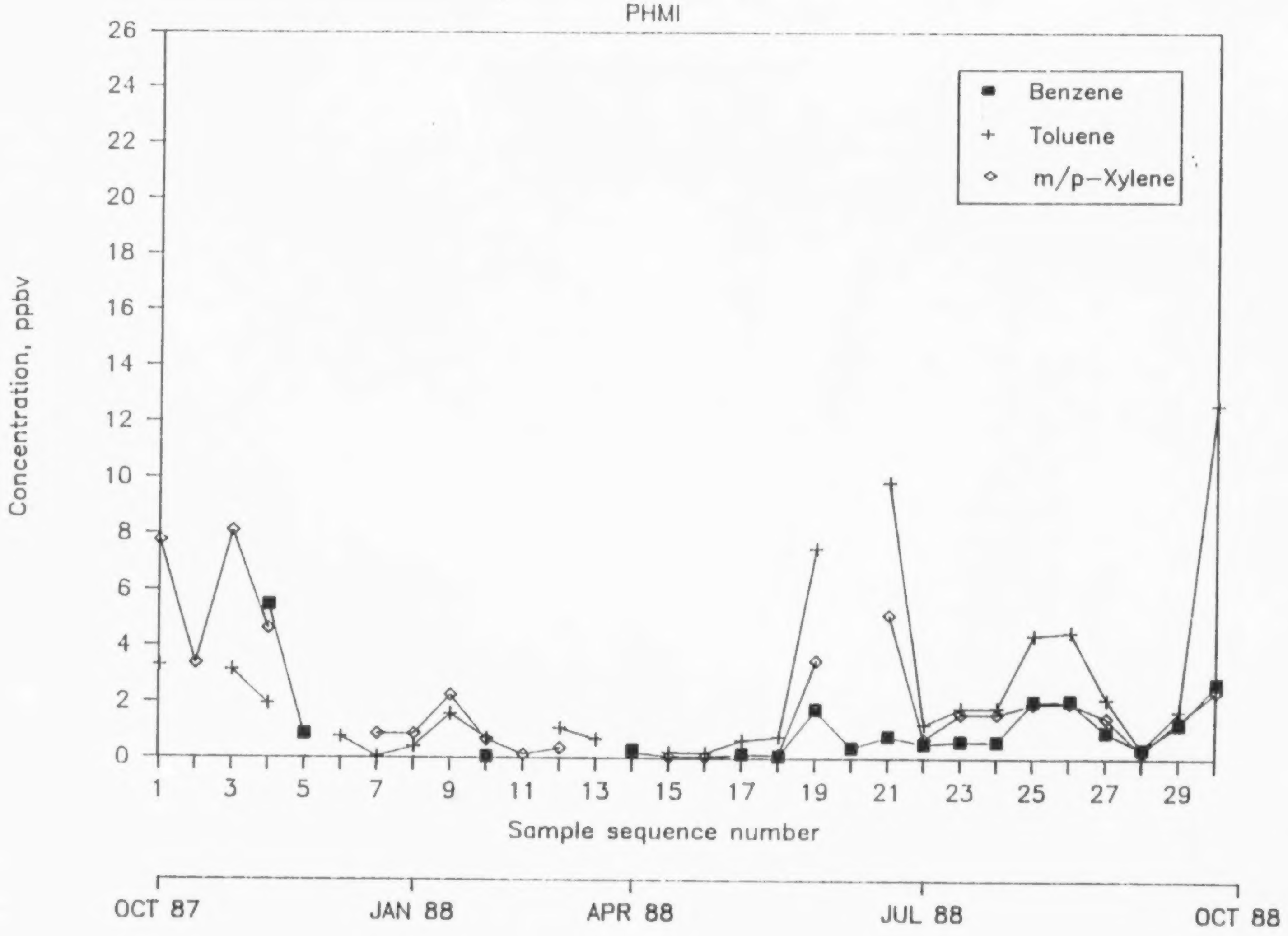

Figure B–18. Benzene, toluene, and m/p–xylene concentration in PHMI 1988 UATMP samples.

BENZENE, TOLUENE, AND M/P-XYLENE CONCENTRATIONS

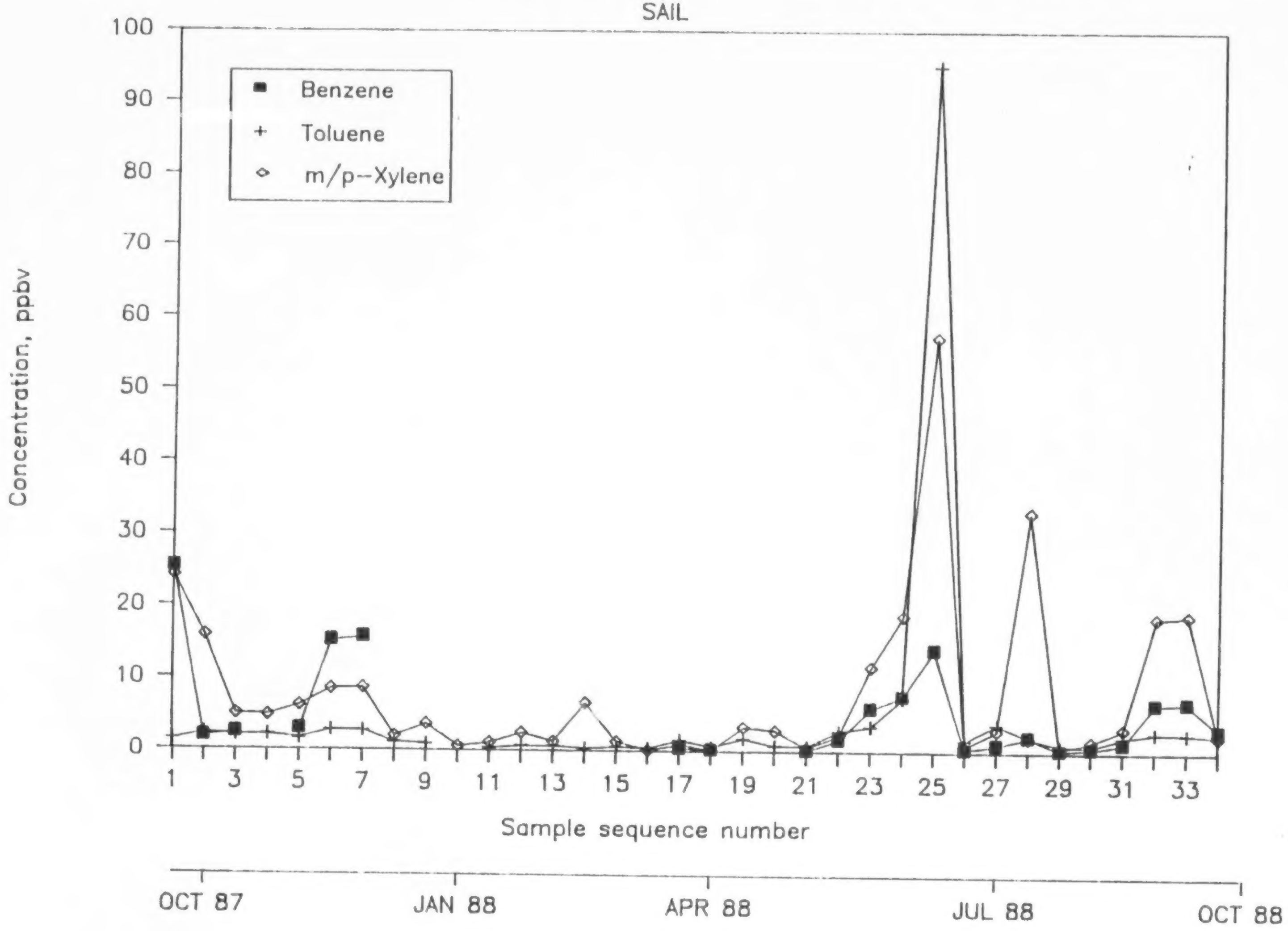

Figure B-19. Benzene, toluene, and m/p-xylene concentration in SAIL 1988 UATMP samples.